

# UNITED STATES DISTRICT COURT SOUTHERN DISTRICT OF NEW YORK

In re: Methyl Tertiary Butyl Ether ("MTBE")
Products Liability Litigation

Master File C.A. No. 1:00-Civ. 1898 MDL No 1358 (SAS)

# This Document Relates To:

Orange County Water District v. Unocal Corp., et al., 04 Civ. 4968

# SUPPLEMENTAL DECLARATION OF ROY HERNDON IN SUPPORT OF PLAINTIFF'S SUPPLEMENTAL BRIEF RE STATUE OF LIMITATIONS

- I, Roy Herndon, hereby declare:
- 1. I am the Chief Hydrogeologist at the Orange County Water District (District).

  Several prior declarations I have submitted in this case set forth my qualifications. I have been employed by the District since 1988.
- I have reviewed the Court's opinion on the statute of limitations in the District's case.
   This declaration addresses issues that the Court asked the District to address.
- 3. The Court asked whether MTBE in groundwater caused the District to act prior to May 6, 2000. The answer to that question is no. The District took no specific action with respect to MTBE in groundwater at any specific location prior to May 6, 2000, for reasons explained below.
- 4. The District shares authority to address groundwater contamination with the Regional Water Quality Control Board and with local oversight authorities. When a release of gasoline containing MTBE is detected by a station operator, that release is required to be reported to either the Regional Board or to local oversight authorities, or both. I am not aware of any authority that



requires that such releases be reported to the District, and such releases are not as a general matter reported to the District by station operators.

- 5. The District relies upon the Regional Board and local oversight authorities to initiate "first responses" to reported releases. The Regional Board and local authorities have the power to order responsible parties to engage in initial investigations and remediation efforts at release sites. The Memorandum of Understanding between the District and the Regional Board, provided to the Court in response to the defendants' primary jurisdiction motion, establishes that the Regional Board will provide initial responses to releases that threaten to contaminate groundwater.
- 6. The District has no reason to take action in response to a release of gasoline containing MTBE at a station where the Regional Board or local authority has received notice of a release, even when the release impacts groundwater at the site of the release, if the Regional Board or local oversight agency has ordered or undertaken remedial efforts at the site. In many cases, remedial efforts are successful and no further action is required by the District. If the Regional Board or local oversight agency elects not to order or undertake remediation, or if MTBE has escaped remediation in significant amounts, however, the MTBE may then pose a threat of appreciable harm if hydrogeologic conditions are such that the MTBE is likely to contaminate groundwater used as a drinking water source. As explained in the Memorandum of Understanding, the District may also provide technical advice, conduct investigations and remediate contamination when requested to do so by Regional Board or a discharger. The District received no such request with respect to any MTBE release site prior to May 6, 2000.
  - 7. Determining whether MTBE has escaped remediation efforts and poses a

threat of appreciably harming groundwater used as drinking water is a lengthy, complex, and expensive process. Because of the complex, multiple-layer hydrogeology and dynamic hydrologic conditions of the Orange County groundwater basin, such determinations require detailed analyses and the installation of multiple-depth monitoring wells outside the area of initial remediation.

- 8. The Orange County groundwater basin covers over 300 square miles. After more than 15 years of detailed groundwater monitoring and analysis, District hydrogeologists and engineers have found that the groundwater basin is composed of three major aquifer systems, all hydraulically connected. The District refers to these as the Shallow, Principal, and Deep aquifer systems.
- 9. The Shallow aquifer system reaches a depth of approximately 200 feet, while the underlying Principal aquifer system reaches depths of approximately 1,500 feet. The Deep aquifer system underlies the Principal aquifer system and reaches depths of 2,000 feet or greater. Each aquifer system is composed of multiple interconnected layers of sands and gravels with intervening less-permeable (but "leaky") clays and silts.
- 10. Most of the approximately 200 drinking water production wells in the District currently draw groundwater from the Principal aquifer system at typical depths of 300 to 1,000 feet. The Principal aquifer system is replenished by recharge water that travels from ground surface through the Shallow aquifer system, including through intervening "leaky" clay and silt layers, into the Principal aquifer system. Only a few production wells are currently deep enough to draw water from the Deep aquifer system.
  - 11. The Shallow aquifer system once supplied large numbers of drinking water wells. In

Care Agency (OCHCA). With respect to this earlier release, the OCHCA approved a remedial action completion certification on September 21, 2001. A true and correct copy of OCHCA's approval is attached to this declaration as Exh. 2.

23. Another release at the Edinger Avenue Chevron station was reported to OCHCA in 2003 and appears to have occurred during the process of removing an underground storage tank. A true and correct copy of the unauthorized release report to OCHCA for this site is attached to this declaration as Exh. 3. OCHCA is currently overseeing attempts to remediate this second release. A true and correct copy of a well installation report (w/o attachments) submitted to OCHCA by the station's consultant is attached to this declaration as Exh. 4. This report identifies MTBE in groundwater at the site in 2005, some four years after the 1997 release had been remediated and a closure certificate approved, at levels of 4,800 ppb (report, page 4). The District has not, at this time, received any information suggesting that the MTBE released in 2003 at the site has escaped the remediation currently being overseen by OCHCA at this site.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Executed this 16<sup>th</sup> day of January, 2007, at Fountain Valley, California.

Roy Herndon



# ADDITIONAL SITE INVESTIGATION REPORT G&M Oil Company Station #24 3301 South Bristol Street Santa Ana, California

# INTRODUCTION

This report has been prepared to summarize the work performed during site investigation activities conducted at the subject property. All work was performed at the request of the Santa Ana Regional Water Quality Control Board (SARWQCB) in accordance with the approved workplan dated December 3, 2002 and recommendations from the "Report of Additional Site Investigation", dated October 25, 2004. The contents of this report include site background, geology, hydrogeology, field investigation procedures and a summary of the work conducted.

## Site Identification

Site Address:

G&M Oil Company Station #24

3301 South Bristol Street

Santa Ana, California 92704

Responsible Party:

G&M Oil Company, Inc.

16868 "A" Street

Huntington Beach, California 92647

SARWQCB Contact:

Ms. Valerie Jahn-Bull

SARWQCB

3737 Main Street, Suite 500 Riverside, California 92501-3339

SARWQCB Case#:

083002853T

15701 CHEMICAL LANE, HUNTINGTON BEACH, CA 92849 (714) 890-7129 FAX: (714) 890-7149

SARWQCB-MTBE-004938

SARWQCB-MTBE-004938

Additional Site Investigation Report G&M Oil Company Station #24 Santa Ana, California Page 2 of 10 May 2, 2005

**Project Contact:** 

Ms. Jennifer L. Talbert G&M Oil Company, Inc. 16868 "A" Street Huntington Beach, California 92647

# **Current Business Activities**

The subject site is currently a service station operating the retail of gasoline and diesel fuel. Four (4) underground storage tanks (USTs; three (3) 10,000-gallon capacity and one (1) 12,000-gallon capacity) service two (2) fuel dispensing islands. UST contents include diesel fuel, regular unleaded, unleaded plus and premium unleaded gasoline. Changes in the current site usage are not anticipated in the near future.

# Spill, Leak and Accident History

On August 29, 1996, an unauthorized release form was documented, relating to the activation of leak detection alarm from the fuel system pipelines. Beyond this, no other known case of spill, leak or accident has been reported.

## BACKGROUND

## Site Description

The subject site is located at the southeast corner of South Bristol Street and Alton Avenue in the City of Santa Ana, California (Figure 1). The site is rectangular in shape and encompasses an area measuring approximately 100-feet by 125-feet. Planters and driveways are located along both Bristol Street and Alton Avenue. The station building is located toward the northeast corner of the site and two (2) fuel dispensing islands are generally located in the central portion of the site. Figure 2 presents a plan depicting existing USTs, fuel dispenser islands and other major site features.

## **Previous Investigations**

On February 3, 1997, USTs were removed from the site. During UST removal activities, soil samples were collected on three (3) separate dates. On February 3, 1997, Atlas Environmental Engineering, Inc. (ATLAS) personnel collected soil samples from beneath fuel dispensers, product piping and USTs at the site. Also, soil samples were collected from the soil stockpiles remaining on-site on February 3, 6, 13 and 20, 1997. The work completed by ATLAS was reported to the SARWQCB in a letter report titled "Tank Replacement Sampling and Proposed Remedial Assessment", dated February 21, 1997.

SARWQCB-MTBE-004939

SARWQCB-MTBE-004939

# TABLE 9 - SUMMARY OF GROUNDWATER ANALYTICAL DATA

G&M OIL CO. STATION #24 SANTA ANA, CA (Concentration, µg/L)

Well	Data	SWE	₩LG	<b>k</b>	E-WATER TPH9	1	Benzene Toluene	Toluene	E-Benzene	Xylenes	MTBE	MTBE (8260)	ETBE	OPE	TAME	T-Butyl Alcohol
KW.	WW.2 * 979/2004	37.11	1.98	8	29.13	25	⊽	⊽	⊽	٧	,	1/2	۵	Ą	Ą	26800
N.W.2	MW-2 1048/2004	37.11	5.37	000	31.74	398	▼	♥	⊽	۵.	1	8.6	Ø,	7	4	9740
MW-2	MW-2 1.04/2005	37.11	7.95	0.00	29.16	1310	91.2	∀	2.5	24	1	113	3.4	62	Ą	19600
MW-2	MW-2 4/18/2005	37.11	12.91	0	24.2	\$08	17.9	8	3	<b>V</b>	•	226	3.7	8.6	❖	33800
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MW.3	6/16/1998	35,94	6.93	0.0	29.01	155000	800	5.8	27	77	152000	1	;	1	•	١.
MW-3	866 V646	35.94	7.23	0.00	28.69	188000	350	7	=	19	186000	:	ı	•	,	ı
MOV.3	12/2/1998	35.94	7.50	0.00	28.44	122000	Ş	</td <td>Ş</td> <td>₹20</td> <td>109000</td> <td>:</td> <td></td> <td>ı</td> <td>i</td> <td></td>	Ş	₹20	109000	:		ı	i	
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MAK3	S/28/1 999	35.94	7.30	0.00	28.64	151000	\$5	\$	€	Q ₹0	150800	a <b>t</b>	ı	1	í	1 ·
MCW-3	8/31/1999	35.94	7.63	90.0	28.31	156000	2	\$	₹	×150	131,000	ŧ	1	ı	1	
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MW-3		35.98	7.68	0.00	28.33	115000	<u>\$61</u>	₩	ę	\$\$	111000	1	ı	1	ι.	
																1000
SWE	· Surveyed	Surveyed Well Elevation.	Hion.	TPHB	- Total Petr	aleum Hyx	(rocerbons a	<ul> <li>Total Petraleum Nydrocarbons as gasofine, EPA 8015M.</li> </ul>	EPA BO15M.	•	<ul> <li>DH-isopropyi ether.</li> </ul>	y ether.			•	rage + of $\omega$
WTO.	- Depth To Water.	Water.		TPHd	- Total Petr	aleum Hyr	frocarbons a	- Total Petroleum Hydrocarhons es diesel, EPA 6015M.	A 8015M.	117	- Elbyl terila	<ul> <li>Ethyl tertlary-butyl either.</li> </ul>	Ŀ			
٤	- Product Thickness (apparent).	Thickness (	epparent).	MTBE	<ul> <li>Methyl terliony butyl ether.</li> </ul>	rieny buly	ether.			₹	Uquid-Pha:	Uquid-Phase Hydrocarbons	Боля			
E-Wale	E-Water - Groundwater elevation	ater elevati	8	v	· Less them	(aborator)	Less than laboratory detection fimits.	mits.			Suspected	Suspected Gauging Error.	j.			
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TABLE 9 - SUMMARY OF GROUNDWATER ANALYTICAL DATA

G&M OIL CO. STATION #24 SANTA ANA, CA (Concentration, µg/L)

Mark   Date   Safe   Date   Mark   Date   Mark   Date																	
11472004   38.45   1912   0.00   19.31   555   C.25   C.	Well	Date	9WE	WITO	Z		EH4	Велите	· Tolusina	E-Benzane	Xylenes	MTBE	WITBE (8260)	ETBE	DIPE	TAME	T-Buryl Acchol
3 49/2004 38.41 742 0.00 31.01 149 0.0 0 1.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	rw.	1 A AZNOA	18 43	191	88	19.31	N N	25	25	25	۵	ļ	383	70	7	٧	2710
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17,47,2003   38,43   7,46   0,00   30,57   2,08   1,3   4   4   4   4   4   4   4   4   4	PANK.	104 \$0004	25	\$13	00.00	30.28	340	3.4	⊽	₹	۵		186	Ø	<b>7</b>	4	282
4 81/24/090 318.41	MW-3	1724/2005	38.43	9,7	8	30.97	208	1.3	. ▼	٧	7		8.22	<b>A</b>	Ę.	Å	1680
1,21,1993   34,72   539   0.00   23,01   15000   15000   15000   15000   1700	MW-3	4/1 8/2005	38.43	11.10	0	27.33	707	5.7	⊽	ដ	7		20.6	Q	4.2	Å	3260
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4         6/16/Lips         34,12         5.53         0.00         75.19         265000         16300         247         9000         2750	MW-4	3/23/1998	34.72	5.30	0.0	29.42	23000	081	2	**	46	21 000	t	t	•	ı	1
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June 21, 2006

Ms. Kathryn Crees
County of Orange Health Care Agency
Hazardous Materials Management Section
1241 East Dyer Road, Suite 120
Santa Ana, California 92705-5611

RE: C&M Oil Company Station #84 (Off-Site)
16990 Beach Boulevard
Huntington Beach, California
Interim Remediation Update #17

Dear Ms. Cross:

Atlas Environmental Ragineering, Inc. (ATLAS) is submitting this brief status update regarding the interim remedial activities that are being conducted off-site of the above referenced subject site (Figure 1). The interim cleanup program was implemented based on the Orange County Health Care Agency (OCHCA) request letter dated October 24, 2000 for aggressive mitigation of the light non-aqueous phase liquid (LNAPL). To date, fifty-three (53) dual phase extraction (DPE) events have been conducted using wells W-17, W-19, W-21, W-22, W-34, W-35, W-37, W-38, W-44, W-45. However, wells W-22, W-34, W35 and W-45 were not used during May 2006 DPE events due to low TPH concentrations in vapor and groundwater. DPE was conducted using a mobile thermal exidizer and ATLAS mobile groundwater treatment system. The DPE events reported during this update were performed on May 17 through 19 and 24 through 26, 2006. For continuity, ATLAS will provide a summary of this data in the quarterly groundwater monitoring report.

During each DPE event, the total gallons of petroleum hydrocarbon impacted groundwater removed, vapor flow rates, vacuum and inlet vapor concentrations are measured and recorded onto field sheets. The inlet vapor concentrations are measured using a PID or FID. At the beginning and end of each DPE event, soil vapor samples are collected in tedlar bags and analyzed by a California certified laboratory for TPHg and BTEX plus fuel oxygenates by EPA Methods 8015M and 8260B. Copies of the project field sheets are included in AppendixA.



RECEIVED HCA/RH
JUN 23 2006

ENVIRONMENTAL HUTH

OCHCA-MTBE-058164

OCHCA-MTBE-058164

OCWD-MTBE-001-250758

TABLE 3 - SUMMARY OF CURRENT GROUNDWATER ANALYTICAL DATA

G&M OIL CO. STATION #04 HUNTINGTON BEACH, CA

(Concentration, μ g/Ł)

Ve!I	Date	SWE	₩LQ	F.	E-WATER	тРНд	Benzerie	Toluene	E-Benzene	Xylenes	MTBE	MTBE (8260)	ETBE	OIPE	TAME	TBA
¥2	12/11/2006	26.01	16.83	0.00	9.18	2300	<2.5	5.5	167	21.0	,	¥\$°	à	ý	<b>%</b>	<25
N-2		ı	ł	ı	ı	1	ı	i	I	ı	1	ļ	ı	1	1	ı
¥3	3/4/1994	25.89	19.92	0.00	2.97	110000	2100	16000	3500	18000		1	1	i	ł	1
¥3	9/22/1994	25.89	20.85	0.00	5.04	41000	2000	28000	1200	0096	ĭ			1	1,	ì
A-3	12/22/1994	25.89	18.74	0.00	6.15	7500	· • 0.3	21000	2300	15000	ı	ı	1	ı	1,.	ŧ
¥3	3/24/1895	25.89	17.60	0.00	8.29	81000	720	26500	4900	22500	1		;	1	ı	ı
N-3	7/17/1995	26.03	19.42	0.00	6.61	64000	118	25000	3200	18000	1	ı	1		ı	i
N-3	9/17/1995	26.03	20.80	0.00	5.23	00099	<150	23600	3500	19800	ı.	,1	:	1	ı	1
N-3	12/10/1995	26.03	21.33	0.00	4.70	70000	150	26000	3800	21300	ı	1-	1	1,	ı	;
83	3/10/1996	26.03	19.61	0.00	6.42	20000	87	20300	2900	16000	ŧ		ı	;	ı	1
₹3	6/9/1996	26.03	19.67	0.00	6.36	58000	20	21000	3300	17000	ı	1	1	ı	ı	1
43	9/8/1996	26.03	21.96	00'0	4.07	79800	120	23000	4300	23000	ı	1	ı	1	t	ı
<b>∧</b> -3	12/1/1996	26.03	22.20	0.00	3.83	00099	19	22000	4000	22000	1	ı	1	ı	1	ı
ξ. 7.3	3/2/1997	26.03	19.70	0.00	6.33	37000	4100	12000	2500	13000	<200	1	ł	ı	i	1
N-3	6/15/1997	26.03	20.64	0.00	5.39	80600	45	15600	3860	18600	<b>~</b> 100	ı	:	ì	ı	ı
SWE	- Surveyed	Surveyed Well Elevation		7PHg	- Total Petrol	eum Hydro	carbons (ga	Total Petroleum Hydrocarbons (gasoline), EPA 8015M		DIPE :	- Di-Isopropyi ether	ether		·	Page	Page 8 of 121
ΔL	- Depth To Water	Water		TPHd	- Total Petrol	eum Hydra	carbons (di	Total Petroteum Hydrocarbons (diesel), EPA 8015M		ETBE .	- Ethyl tert-Butyl ether	y ether				
, <b>5</b> -	- Product Ti	Product Thickness (apparent)		MTBE	- Methyl tert-Butyl ether	Butyl ethe		£		LPH .	Liquid-Phase Hydrocarbons	Hydrocarbo	2			
≟-Water	E-Water - Groundwater elevation	ter elevation	•	•	. Less than laboratory detection limits	sboratory d	etection lim	<b>₹</b> 2		•	Suspected Gauging Error	uging Error				
	<ul> <li>Not analyzed</li> </ul>	je g		A A	Not Available	<u>.</u>					Duplicate sample	ejdı				
<b>a</b> /L	- Micrograms per Liter	ns per Liter	,	TAME .	<ul> <li>tert-Amyl Methyl ether</li> </ul>	ethyl ether				ī ++	- Groundwater Sampled on Alternate Days	Sampled on	Alternate Da	ys		
ر (	- I arger Sa	mple votume	is used to a	achieve L	- I arger Sample volume is used to achieve Lower Detection Limits	n Limits				:	- Obtained from Higher Dilution	Higher Dilut	ion			
										•						

# TABLE 3 - SUMMARY OF CURRENT GROUNDWATER ANALYTICAL DATA

# G&M OIL CO. STATION #04 HUNTINGTON BEACH, CA

(Concentration, µg/L)

Veil	Date	SWE	WTQ	F.	E-WATER	тРИв	Benzene	Toluene	E-Banzena	Xylenes	MTBE	MTBE (8260)	ET 8E	DIPE	TAME	TBA
44	12/6/1998	26.15	24.29	0.00	1.86	66200	20700	84	2910	50.4	13300	1	ı	ï		;
V-17	3/7/1999	26.15	23.58	000	2.57	39200	21300	303	2680	407	16100	ï	1,	ı	t	:
V-17	. 6/6/1888	26.15	23.42	0.00	2.73	00069	21800	29.1	1750	1380	22600	t	:		ı	:
V-17	9/12/1999	26.15	25.96	0.00	0.19	37100	12300	٤٢ .	1450	283	10150	ţ	1	1	ı	1
¥-17	11/21/1998	28.15	27.11	0.00	-0.96	59500	27600	490	3040	2040,	18000	1.	1	1	ı	1
V-17	3/19/2000	26.15	25.18	00'0	0.99	59400	28600	3360	3450	9200	3480	1	1.	ı	í	i
V-17	6/4/2000	26.15	24.96	0.00	1.19	42200	17500	159	1620	1560	14300	ı	ı	ı	•	1
V-17	9/14/2000	26.15	27.46	FILM	-1.31	를	ı	1	1	1	1	ı	ı	1.	1 -	ŀ
٧-17	11/22/2000	26.15	28.32	FILM	-2.17	F.	ı	•	·.	ı	ŀ	1	ı,	ı	:	ı
<b>√-17</b>	2/28/2001	26.15	28.00	FILM	-1.85	로	ı	1	1,		ı	ı	<b>t</b>	1		1,
V-17	5/30/2001	26.15	26.19	0.00	-0.04	21200	6850	235	730	895	1	4330	110	×100	۰100 د	×500
<b>∧</b> -17	8/15/2001	26.15	27.61	0.00	-1.46	71400	22200	1460	2860	4240	1	18800	200	<400	<b>~</b> 400	<2000
N-17	11/8/2001	26.15	32.06	3.48	-3.28	Ę	1	1	1.	ī,	1	1	, 1	1	<b>I</b> .	ti k
N-17	2/12/2002	26.15	28.50	0.03	-2.32	륟	!	ŧ	:	ı		ı	1	ı	ı	1
N-17	5/22/2002	28.15	29.05	0.75	-1.80	FH	i	ı	:	•	1	1	ı	i	1	t
SWE	- Surveyed	Surveyed Well Elevation		TPHg	- Total Petro	eum Hyd	rocarbons (g	Total Petroleum Hydrocarbons (gasoline), EPA 8015M	NS.		- Di-isopropyi ether	f ether			Page	Page 58 of 121
λ V	- Depth To Water	Water		TPHdT	Total Petroleum Hydro     Modby 4 or But ather	eum Hyd	rocarbons (c	Total Petroleum Hydrocarbons (diesel), EPA 8015M		 LPH .	Liguid-Phas	Liquid-Phase Hydrocarbons	. 5			
J. Mater	of Product Inchies (8)	Product Inckiless (appareing	frage (c)	<u> </u>	- Less than b	aboratory	Less than laboratory detection limits	nits			Suspected (	Suspected Gauging Error			•	
	Not analyzed	red		ž	- Not Available	· •				, +-	Ouplicate sample	ımple				
<u>.</u>		Micmorains ner Liter		TAME	<ul> <li>tert-Amyl Methyl ether</li> </ul>	lethyl ethe	=			++	Groundwate	- Groundwater Sampled on Atternate Days	Alternate [	Jays	•	
j -	- Larger Sa	- 1 arger Sample volume is used to ac	o) pesn si a	achieve l	chieve Lower Detection 1 Imits	on I Imits				:	Obtained fro	. Obtained from Higher Dilution	rtion			

# August 11, 2010

:	Page 1	
1	UNITED STATES DISTRICT COURT	
2	SOUTHERN DISTRICT OF NEW YORK	
3		
4	IN RE: METHYL TERTIARY BUTYL	
	ETHER ("MTBE")	
5		
	This Document Relates to:	
6		
	ORANGE COUNTY WATER DISTRICT	
7	v. UNOCAL CORPORATION, et al.,	
	Case No. 04CIV.4968 (SAS)	
8	/	
9.		
10	_ <b></b>	
11	Wednesday, August 11, 2010	
12		
13		
	Telephonic hearing before Special Master	
14	Kenneth Warner in re Defendants Motion to Compel	
	Depositions Seeking Station Specific Testimony,	
15	beginning at 12:03 p.m.	
16		
1.7	EXHIBIT	
18 .	Reported by:	
	Sandra Bunch VanderPol, CSR #3032	
19	Certified Realtime Reporter	
	Registered Merit Reporter	
20	Realtime Systems Administrator credentialed	
	Fellow, Academy of Professional Reporters	
21		
22		
23	GOLKOW TECHNOLOGIES, INC.	
	877.370.3377 ph 917.591.5672 fax	
24	deps@golkow.com	
25		

# August 11, 2010

```
Page 18
     establishes, as of the last time we're going to be
 1
     able to take fact specific discovery, what do they
 2
 3
     know; what have they decided; what is the state of
 4
     play.
              SPECIAL MASTER WARNER: Okay. Mr. Miller?
 5
 6
     Ms. O'Reilly?
                                  Mr. Heartney left a lot
 7
             MR. MILLER:
                           Yes.
           He's already taken a deposition of Roy Herndon,
 8
     which heads the hydrogeology department --
 9
10
              SPECIAL MASTER WARNER:
                                       Is that the
     deposition from '08 or more recent?
11
.12
              MR. MILLER:
                            This week --
              SPECIAL MASTER WARNER: Oh, this week, okay.
13
                          -- where they were invited to
14
              MR. MILLER:
     ask about the Harqis work. They got maps that show
15
     the precise location for each station where the
16
     samples points are expected to occur. It is not
17
               They grilled him about the fact that the
18
     general.
19
     total costs would exceed $5 million and complained
20
     about it.
              The claim that they don't know what we're
21
22
     currently doing at the stations is simply wrong.
     claim that they haven't done discovery about it is
23
     outdated as of Mr. Roy Herndon's deposition.
24
25
              They said the deposition would be done in
```

# August 11, 2010

Page 19 one day. It's not quite finished. But when it is 1 2 finished, they will have covered all of that ground concerning the Hargis report. 3 They also have the opportunity to depose 4 5 Harqis, because they are going to be designated as 6 experts. And expert discovery has not commenced. 7 They are also going to be able to depose the 8 District's hydrogeologists concerning this subject, because they will be listed as nonretained experts, 9 who will be offering opinions in the case, and they 10 11 will then insist that during the exert phase of discovery that they be deposed. 12 SPECIAL MASTER WARNER: Wait. 13 I'm sorry. 14 Is it someone besides Hargis? 15 MR. MILLER: Yes. The -- Roy Herndon --SPECIAL MASTER WARNER: Oh, yes, right. 16 17 Okay. Staff members. 18 MR. MILLER: 19 SPECIAL MASTER WARNER: Huh-huh. Okay. 20 They also said, well, we need MR. MILLER: to do depositions because of Friedman & Bruya data. 21 22 They forgot to mention that they took depositions concerning the Friedman & Bruya data at length for 23 24 They claim that they need this to catch up and 25 wrap things up.

	80	H 3032	
Exhibit No. 67	12	Witness: 80L/	



	•
1 Change Mo Cand (Former Cott Ct. 444.4)	
_	
Z   5932 Westminster Blvd, CA	
4	
Site had multiple fuel leaks between 1992 and the present, including fuel leaks that were detected or identified on 9/2/92.	acluding fuel leaks that were detected or identified on 9/2/92,
-	2002
City for the first terms Toll 10 to the first terms of the first terms	Stokend of look 34 1871 look oddon followers of the standing for notions included forth. India debastor toots, made
7 Joseph at least 21 U.S.1 Inspection failures of Violations 1	l o inspections, including ligniness tests, legir detector tests, and
containment tests, from 11.22/2002 to 4/23/2003.	10.10.10.10.10.10.10.10.10.10.10.10.10.1
Regulator Agency has issued at least 12 notifications to RP from 11/4/95 to 3/21/08 for inadectuate or ineffective	from 11/4/95 to 3/21/08 for inadecruate or ineffective
9 Investigations, work plans, reports, and remediation.	
01	
11 MTBE 1st tested in groundwater: 3/5/97 in MW-03.	
12 MTBE 1st detected in groundwater: 3/5/97 in MW-03 - 54,000 ug/L	, ng/L,
13 Max MTBE detected in a gw monitoring well: 6/13/97 in MW-03 - 65,000 ug:l.	J3 - 65,000 vg/L.
14 15 TBA 1st tested in groundwater 5/15/00 in B1 (Jahorakov detection limit was 5/01 unt)	dien limit was Soft not 1)
	vision filler reas 500 dg/L/.
	מיים ל המיים ויווי נים דל הל הל
18 Max TBA detected in a gw monitoring well: 2/10/04 in MW-04 - 8,600 ug/L	- 8,600 ug/L
20 2 saturated zones are Identified:	AND THE PROPERTY OF THE PROPER
semi-perchad upper zone - from ~5 to >25 ft bgs (shallow MVVs screened various intervals between 5 & 25 ft bgs.	WWs screened various intervals between 5 & 25 ft bgs.
semi-perched lower zone - <76 to >86 ft bgs (3 wells ea w/ 3-foot screens at various depths betw 76 & 86 ft bgs)	3-foot screens at various depths betw 76 & 86 ft bgs).
23 Alpha Aquifer - estimated at ~165 ft bgs.	
25 Farthest downgradient well MW-16 (upper zone) 1st tested for MTBE & TBA on 8/9/04 · MTBE & TBA not dotected	MTBE & TBA on 8/9/04 - MTBE & TBA not detected.
26 1st tested for MTBE and TBA on 8/9/04.	
(	or TBA detected between 8/9/04 and 9/25/07.
2nd	
19 1st tested for MTBE on 10/23/00.	
30 1st detected MTBE detected 10/23/00 at 511 ug/L.	
_	The Company of the Co
133 1st detected TBA detected 4/22/02 at 149 ug/L.	
34 Max TBA detected 2/28/05 at 1,800 ug/L.	The state of the s
	man and the state of the state
	SW (RP consultant reports).
	SE (RP consultant reports).
38 Vertical groundwater gradient between upper and lower zones appears upward, but uncertain 39	appears upward, but uncertain.
40 Remediation: groundwater capture has never been initiated at this site;	this site:
	water have been identified.
42	
MTBE and TBA groundwater plumes have migrated off s	MTBE and TBA groundwater plumes have migrated off site to the N, NW, and/or W, and possibly SE (12/14/06 Cambria
Environmental - Fourth Quarter 2006 Groundwater Monitoring	Environmental - Fourth Quarter 2006 Groundwater Monitoring and Status Report, Chevron Station 9-5401, 5992 Westminster
Boulevard, Westminster, California, Case #96UT035; 11/2/0	Boulevard, Westminster, California, Case #96UT036; 11/2/07 Conestoga-Rovers & Assoc Third Quarter 2007 Groundwater
Monitoring and Status Report, Chevron Station 9-5401, 5992 Westminster Boulevard, Westminster, California, Case	Westminster Boulevard, Westminster, California, Case
#30U (135, 17UV) Consestiga-reveals & Assoc Monitoring Well installation and Usygen Injection Work Plan, Chevron	y Well Installation and Oxygen Injection Work Flan, Chevron
43 Starion 9-5401, 5992 Westimister Douevard, Westiminster, Camornia, Case #9001055	allorina, case #900 / 030
The state of the s	

	<b>4</b>
45	45 Historic MTBE and TBA gw plumes have not been delineated taterally
46	46 Recent MTBE and TBA gw plumes have not been delineated laterally.
47	47 MTBE and TBA gw plumes have not been delineated vertically.
8	
\$	49 MTBE & TBA gw plumes not only NOT delineated vertically, NOT even investigated (except DW-1, -2, -3).
ଝ	
5	51 Groundwater conduits are near by (potential migration paths from shallow saturated zones to deeper saturated zones):
52	Nearest well: W-2399 - domostic well ~1,400 ft S of site.
53	Drilled to 670 ft bgs.
3	Screened 281 to 327, 449 to 465, and 597 to 610 ft bgs.
ß	pump rate - unknown.
8	Nearest drinking water production well: HB-4 - ~3.000 ft S of site.
57	Drilled to 826 ft bgs.
88	Screened 252 to 804 ft bgs.
29	Pump rate - 3000 gpm.
9	Top of Shallow zone - ~46 ft bgs.
9	Bottom of Shallow zone - ~159 ft bgs.
62	Top of Principal Aquiter - ~169 ft bgs.
63	
8	64 Nearest MTBE detection in drinking water production well:
92	HB-7: 0.16 ug/L in 2006 (LIMS).
99	HB-13: 0.17 ug/L in 2005 (LIMS)

## Chevron #1921

3901 S. Bristol Street, Santa Ana

Fuel leaks were detected at the site in 1988 and 1990 during tank upgrades / replacements (Radian, 8/3/90, Soil and Groundwater Investigation at Chevron Statoin No. 1921, Santa Ana, California; Harding ESE, 3/21/02, Groundwater Monitoring Wells Installation Report, Chevron Service Station No. 9-1921, 3801 South Bristol Street, Santa Ana. California CRWQCB Case No. 083001181T).

RP missed multiple work plan and reporting deadlines, and did not include requested data and information in work plans and reports.

MTBE 1st tested in gw: 7/23/96 in MW-02.

MTBE 1st detected in groundwater: 7/23/96 in MW-02 - 830 ug/L.

Max MTBE detected in a gw monitoring well: 9/9/98 in MW-06 - 200,000 ug/L.

TBA 1st tested in groundwater: 10/18/00 in MW-06 (ND<2000 ug/L - detected the next time tested in well).

TBA 1st detected in groundwater: 1/16/01 in MW-06 - 59,100 ug/L.

Max TBA detected in a gw monitoring well: 1/16/01 in MW-06 - 59,100 ug/L.

2 saturated zones are identified (Radian):

semi-perched gw zone: from ~25 to >40 ft bgs.

Talbert Aquifer - ~80 ft bgs.

Off Site, Farthest downgradient wells - MW-13 & MW-15:

MTBE 1st tested: 7/23/96 in MW-13 - ND<10 ug/L.

MTBE 1st detected: 1/16/97 in MW-15 - 1.2 ug/L.

Max MTBE: 1/22/08 in MW-15 - 0.06J ug/L.

TBA 1st tested: 10/18/00 in MW-13 - ND<20 ug/L.

TBA 1st detected: 1/2/07 in MW-13 - 41 ug/L.

Max TBA: 4/7/08 in MW-13 - 1,000 ug/L.

BUT MW-13 & MW-15 not in optimum position / screened interval (see SAIC - Fig 3, 7-3-07 GW Elev map).

MW-14 is farthest downgradient well from probable source (USTs); MW-14 on site margin:

MTBE 1st tested in MW-14: 7/23/96.

MTBE 1st detected in MW-14: 7/23/96 - 300 ug/L.

Max MTBE detected in MW-14: 4,230 ug/L.

TBA 1st tested in MW-14: 10/18/00 (ND<1000 ug/L - detected next time tested).

TBA 1st detected in MW-14: 1/16/00 - 98 ug/L.

Max TBA detected in MW-14: 1.300 ug/L.

Semi-perched groundwater flow direction is W to S (SAIC report).

Deeper groundwater flow direction is W (ref OCWD).

Vertical groundwater gradient is down (OCWD).

Remediation: initiated 2005 to 2006: overpurge selected wells; NO groundwater capture initiated.

late 1988 - UST removal - free product observed on water (later observed in 3 wells: MW-4, -5, -7).

Mar-91 - VE test.

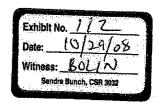
Aug-02 - free product observed - MW-05R.

Feb-03 - free product observed - MW-05R.

2005 to 2006 - overpurge selected wells.

Sep-07 - proposes to install DPE system - 9 yrs after free product discovered.

MTBE and TBA groundwater plumes have migrated off site W - SW - S, but especially SW (9/25/07 SAIC - Submittal of 3rd Quarter 2007 Progress and Groundwater Monitoring Report, Chevron Service Station No. 9-1921, 3801 South Bristol Street, Santa Ana, CRWQCB Case No. 083001181T.





Historic MTBE and TBA gw plumes have not been delineated laterally. Recent MTBE and TBA gw plumes have not been delineated laterally. MTBE and TBA gw plumes have not been delineated vertically.

Groundwater conduits are near by (potential migration paths from shallow saturated zones to deeper saturated zones):

Nearest well: W-4516 - domestic well ~335 ft NE of site:

Drilled to 220 ft bgs (in Principal Aquifer).

Screened \_unknown\_ ft bgs:

pump rate - unkown.

Top of Shallow zone - ~38 ft bgs,

Bottom of Shallow zone - ~134 ft bgs.

Top of Principal Aquifer - ~157 ft bgs.

Nearest pumping well: MTSN-SA - ~1,890 ft W of site - agr/irr well.

Drilled to 914 ft bgs (in Principal Aquifer).

Screened: unknown

pump rate - unkown.

Top of Shallow zone - ~32 ft bgs,

Bottom of Shallow zone - ~130 ft bgs.

Top of Principal Aquifer - ~148 ft bgs.

Nearest drinking water production well: MCWD-1B - ~5,850 ft W of site.

Drilled to 612 ft bgs (in Principal Aquifer).

Screened: 305-335, 350-390, 440-500, and 540-580 ft bgs.

Pump rate - ~3000 gpm.

Top of Shallow zone - ~32 ft bgs,

Bottom of Shallow zone - ~139 ft bgs.

Top of Principal Aquifer - ~160 ft bgs.

Nearest MTBE detection in drinking water production well: NONE yet.

## Chevron #1921

3901 S. Bristol Street, Santa Ana

Fuel leaks were detected at the site in 1988 and 1990 during tank upgrades / replacements (Radian, 8/3/90, Soil and Groundwater Investigation at Chevron Statoin No. 1921, Santa Ana, California; Harding ESE, 3/21/02, Groundwater Monitoring Wells Installation Report, Chevron Service Station No. 9-1921, 3801 South Bristol Street, Santa Ana, California CRWQCB Case No. 083001181T).

RP missed multiple work plan and reporting deadlines, and did not include requested data and information in work plans and reports.

MTBE 1st tested in gw: 7/23/96 in MW-02.

MTBE 1st detected in groundwater: 7/23/96 in MW-02 - 830 ug/L.

Max MTBE detected in a gw monitoring well: 9/9/98 in MW-06 - 200,000 ug/L.

TBA 1st tested in groundwater: 10/18/00 in MW-06 (ND<2000 ug/L - detected the next time tested in well).

TBA 1st detected in groundwater: 1/16/01 in MW-06 - 59,100 ug/L.

Max TBA detected in a gw monitoring well: 1/16/01 in MW-06 - 59,100 ug/L.

2 saturated zones are identified (Radian):

semi-perched gw zone: from ~25 to >40 ft bgs.

Talbert Aquifer - ~80 ft bgs.

Off Site, Farthest downgradient wells - MW-13 & MW-15:

MTBE 1st tested: 7/23/96 in MW-13 - ND<10 ug/L.

MTBE 1st detected: 1/16/97 in MW-15 - 1.2 ug/L.

Max MTBE: 1/22/08 in MW-15 - 0.06J ug/L.

TBA 1st tested: 10/18/00 in MW-13 - ND<20 ug/L.

TBA 1st detected: 1/2/07 in MW-13 - 41 ug/L.

Max TBA: 4/7/08 in MW-13 - 1,000 ug/L.

BUT MW-13 & MW-15 not in optimum position / screened interval (see SAIC - Fig 3, 7-3-07 GW Elev map).

# MW-14 is farthest downgradient well from probable source (USTs); MW-14 on site margin:

MTBE 1st tested in MW-14: 7/23/96.

MTBE 1st detected in MW-14: 7/23/96 - 300 ug/L.

Max MTBE detected in MW-14: 4,230 ug/L.

TBA 1st tested in MW-14: 10/18/00 (ND<1000 ug/L - detected next time tested).

TBA 1st detected in MW-14: 1/16/00 - 98 ug/L.

Max TBA detected in MW-14: 1.300 ug/L.

Semi-perched groundwater flow direction is W to S (SAIC report).

Deeper groundwater flow direction is W (ref OCWD).

Vertical groundwater gradient is down (OCWD).

Remediation: initiated 2005 to 2006: overpurge selected wells; NO groundwater capture initiated.

late 1988 - UST removal - free product observed on water (later observed in 3 wells: MW-4, -5, -7).

Mar-91 - VE test.

Aug-02 - free product observed - MW-05R.

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2005 to 2006 - overpurge selected wells.

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MTBE and TBA groundwater plumes have migrated off site W - SW - S, but especially SW (9/25/07 SAIC - Submittal of 3rd Quarter 2007 Progress and Groundwater Monitoring Report, Chevron Service Station No. 9-1921, 3801 South Bristol Street, Santa Ana, CRWQCB Case No. 083001181T.

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Groundwater conduits are near by (potential migration paths from shallow saturated zones to deeper saturated zones):

# Nearest well: W-4516 - domestic well ~335 ft NE of site:

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Screened \_unknown\_ ft bgs.

pump rate - unkown.

Top of Shallow zone - ~38 ft bgs.

Bottom of Shallow zone - ~134 ft bgs.

Top of Principal Aquifer - ~157 ft bgs.

# Nearest pumping well: MTSN-SA - ~1,890 ft W of site - agr/irr well.

Drilled to 914 ft bgs (in Principal Aquifer).

Screened: unknown

pump rate - unkown.

Top of Shallow zone - ~32 ft bgs,

Bottom of Shallow zone - ~130 ft bgs.

Top of Principal Aquifer - ~148 ft bgs.

# Nearest drinking water production well: MCWD-1B - ~5,850 ft W of site.

Drilled to 612 ft bgs (in Principal Aquifer).

Screened: 305-335, 350-390, 440-500, and 540-580 ft bgs.

Pump rate - ~3000 gpm.

Top of Shallow zone - ~32 ft bgs,

Bottom of Shallow zone - ~139 ft bgs.

Top of Principal Aquifer - ~160 ft bgs.

Nearest MTBE detection in drinking water production well: NONE yet.

Multiple fuel leaks were detected at the site in 1989 and indicated later (free product detected in wells leading away from site - MW-4, MW-7, MW-10, MW-13 & MW-14 up to Aug-00) during facility (tanks, dispensers, and pipes) upgrades / replacements (UST Unauthorized Release (Leak) Contamination Site Reports).

Agencies made numerous requests for action - NOV issued in 2007 - unwillingness to maintain UST inspection records.

MTBE 1st tested in gw: 7/1/96 in MW-5.

MTBE 1st detected in groundwater. 7/1/96 in MW-5 - 71 ug/L. Max MTBE detected in a gw monitoring well: 2/0/01 in MW-14 (off-site) - 1,200 ug/L.

MTBE spike in 2005 in well MW-4 - possibly new release - MW-4 is adjacent to dispenser island.

DIPE detectd in MW-16 (on site, adjacent between dispensers) - 2001 to 2006.

DIPE detected in MW-7 (downgradient, site margin) - 2001 to 2004.

DIPE and ETBE detected in MW-10 (downgradient, off-site) - 2001 to 2005; TAME detected in 2005.

DIPE detected in MW13 & -13A (downgradient, off-site at site margin) - 2001 to 2004. DIPE and ETBE detected in MW-14 (downgradient, off-site) - 2001 to -2004; DIPE also in 2005 to 2007.

IBA 1st tested in groundwater: 4/16/01 in MW-14 (ND<3,000 ug/L - detected 1st time tested at below 300 ug/L).

TBA 1st detected in groundwater. 7/30/02 in well MW-14 - 290 üg/L. Max TBA detected in a gw monitoring well: 7/30/02 in well MW-14 - 290 üg/L.

2 saturated zones are identified (ENSR):

Exxon #4283 (south, across street from site) reports 3 zones in semi-perched - "upper," "middle," and "lower." Unocal #5376 wells are screened across two zones: "upper" and "middle" semi-perched zones semi-perched gw zone 20 to >40 ft bgs:

Off Site - farthest downgradient wells: MW-15 (SE). Talbert Aquifer top at ~60 ft bgs.

MTBE 1st detected: 12/27/96 - 140 ug/L MTBE 1st tested: 7/1/96.

Max MTBE: 12/27/96 - 140 ug/L.

TBA 1st tested: 8/4/05.

TBA 1st detected: 8/21/07 - 12J.ug/L.
Max TBA: 8/21/07 - 12J ug/L.
On-site - site-margin well MW-7 in downgradient SE direction:
MTBE 1st tested: 9/16/96.

MTBE 1st detected: 3/3/97 - 180 ug/L. Max MTBE: 11/17/99 - 300 ug/L (still detected today at MCL).

DIPE 1st tested 4/16/01.

DIPE 1st detected: 4/16/01 - 23 ug/L. Max DIPE: 2/27/04 - 35 ug/L.

Deeper groundwater (Talbert) flow direction is unreported (ENSR report). Vertical gw gradient is downward (OCWD). Semi-perched groundwater flow direction is SE (ENSR report).

```
Remediation: SVE initiated in 1996; NO groundwater capture initiated.
```

Sep-89 - USTs, dispensers, and piping removed - hydrocarbon contaminated soil and gw detected, soil exavated. additionally, free product observed in downgradient wells (MW-7, MW-10, MW-13 & MW-14). Nov-91 - free product observed in downgradient site margin well (MW-4).

Jan-93 - USTs removed from site, again.

1996 - SVE initiated - 7yrs after detecting contaminated soil and groundwater. 1999 - SVE discontinued.

2000 - SVE restarted.

2003 - SVE discontinued again; Closure Request made to OCHCA - denied closure

2005 - SVE discontinued again; Closure Request made to OCHCA - denied closure Mar-07. 2004 - SVE restarted again.

Jan-07 - notice of violation (NOV) issued for inspection violation (on-going for 16 months; multiple warnings). Mar-05 - site sold to Jiffy-Lube.

MTBE and TBA groundwater plumes have migrated off site SE (4/15/08 ENSR - Quarterly Groundwater Monitoring Report, First Quarter 2008, Chevron Site ID No. 305631 (Former Unocal Service Station No. 5376, 8971 Warner Avenue, Huntington Beach, California, Case No. 89UT168).

Historic MTBE and TBA gw plumes have not been delineated laterally. Recent MTBE and TBA gw plumes have not been delineated laterally. MTBE and TBA gw plumes have not been delineated vertically. Groundwater conduits (potential migration paths from shallow saturated zones to deeper saturated zones):

Nearest well in Shallow Aqufier: W-2210 - agg/irr well ~1,100 ft E of site (downgradient in semi-perched zone).

Drilled to 386 ft bgs (Principal Aquífer).

Screened 114 to 124 ft bgs (Shallow Aquífer).

Sanitary seal - NO

Top of Shallow zone - ~44 ft bgs, pump rate - unknown.

Bottom of Shallow zone - ~190 ft bgs. Top of Principal Aquifer - ~225 ft bgs.

Nearest drinking water production well: HB-9 - (Principal Aquifer) -600 ft W of site - in downgrad direction. Drilled to 1,010 ft bgs.

Screened: 556 to 996 ft bgs.

pump rate - 5,000 gpm. Sanitary seal - YES.

Bottom of Shallow zone - ~170 ft bgs. Top of Shallow zone - ~41 ft bgs,

Fop of Principal Aquifer - ~192 ft bgs.

Nearest MTBE detection in drinking water production well: NB-TAMD: 0.12 ug/L in 2005. NB-TAMD: 0.04 ug/L in 2008.

2 of 2

Harry A. Paltor, Celifornia CSR No. 7708

Multiple fuel leaks were detected at the site in 1989 and indicated later (free product detected in wells feading away from site - MW-4, MW-7, MW-10. MW-13 & MW-14 up to Aug-00) during facility (lanks, dispensers, and pipes) upgrades / replacements (UST Unauthorized Rolease (Leak) Confamination Sile Reports).

8971 Warner Avenue, Fountsin Valley

Unocal #5376

Agencies made numarous requests for action - NOV issued in 2007 - unwillinguess to maintain UST inspection records.

MTBE 1st tested in gw. 7/1/96 in MW-5.

MTBE 1st detected in groundwater. 77/196 in MW-5 - 71 ug/t.
Max MTBE detected in a gw monitoring well: 20001 in MW-14 (off-site) - 1,200 ug/t.
MTBE spike in 2005 in well MW-4 - possibly new release - MW-4 is adjacent to dispenser island.

DIPE detectd in MW-16 (on site, adjacent belween dispensers) - 2001 to 2006.

DIPE detected in MW-7 (downgradient, site margin) - 2001 to 2004. DIPE and ETBE detected in MW-10 (downgradient, off-site) - 2001 to 2005; TAME detected in 2005.

DIPE detected in MW13 & -13A (downgradient, off-site at site margin) - 2001 to 2004.

DIPE and ETBE detected in MW-14 (downgradient, off-site) - 2001 to ~2004; DIPE also in 2005 to 2007.

TBA 1st tested in groundwater. 4/16/01 in MW-14 (ND<3,000 ug/L. datected 1st time tested at below 300 ug/L). TBA 1st detected in groundwater. 7/30/02 in well MW-14 - 290 ug/L. Max TBA detected in 9 gw monitoring well. 7/30/02 in well MW-14 - 290 ug/L.

2 saturated zones are identified (ENSR);

semi-perched gw zone 20 to >40 ft bgs.

Exxon #4283 (south, across street from site) reports 3 zones in semi-perched - "upper," middle," and "laver," Unocal #5376 weits are screened across two zones: "Upper" and "middle" semi-perched zones.

Talbert Aquifer: top at ~60 ft bgs.

Off Site - faithest downgradient wells: MW-15 (SE),

MTBE 1st tested: 7/1/96. MTBE 1st detected: 12/27/96 - 140 ug/l.

Max MTBE: 12/27/96 - 140 ug/L. TBA 1st lested: 8/4/05.

TBA 1st detected: 8/21/07 - 12J ug/L,

On-site - site-margin well MW-7 in downgradicut SE direction; Max TBA: 6/21/07 - 123 ug/l

MTBE 1st lested: 9/16/96.

MTBE 1st detected: 3/3/97 - 180 ug/L

Max MTBE: 11/17/99 - 300 ug/L (siill detected today at MCL).

DIPE 1st detected: 4/16/01 - 23 ug/L DIPE 1st tested 4/16/01.

Max DIPE: 2/27/04 - 35 ug/L.

Semi-perched groundwater flow direction is SE (ENSR report). Deeper groundwater (Taibert.) flow direction is unreported (ENSR report). Vertical gw gradient is downward (OCWD).

1 of 2

Remediation: SVE Initiated in 1996; NO groundwater capture initiated.

Sep-89 - USTs, dispensers, and plaing removed - hydrocarbon contaminated soil and gw detected, soil exavated, Nov-91 - free product observed in downgradient site margin well (MW-4), additionally, free product observed in downgradient wells (MW-7, MW-19, MW-13 & MW-14), Jan-93 - USTs removed from site, again.

1996 - SVE inflated - Tyrs after detecting contaminated soll and groundwater.

1999 - SVE disconfinued. 2000 - SVE restarted

2003 - SVE discontinued again: Closure Request made to OCHCA - denied closure. 2004 - SVE restanted again.

2005 - SVE discontinued again; Closura Request made to OCHCA - denied closure Mar-07.
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Historic MTBE and TBA gw plumes have not been delineated laterally. Recent MTBE and TBA gw plumes have not been delineated latorally. MTBE and TBA gw plumes have not been delineated vertically. Groundwater conduits (potential migration paths from shallow saturated zones to deeper saturated zones):

Nearest well in Shallow Aquifer: W-2210 - aga/in well ~1,130 ft E of site (downgradient in sem:-perched zone).

Drilled to 388 ft bgs (Principal Aquifer).

Screened 114 to 124 ft bgs (Shallow Aquifer).

pump rafe - unknown. Sanitary seat - NO

Top of Shallow zone - ~44 ft bgs, Bottom of Shallow zone - ~190 ft bgs. Top of Principal Aquifer - ~225 ft bgs.

Noarest drinking water production well: HB-9 - (Principal Aquifer) -600 ft W of site - in downgrad direction,

Drilled to 1,010 ft bgs. Screened: 556 to 996 ft bgs.

pump rate - 5,000 gpm.

Top of Shallow zone - -41 ft bgs.

Bettern of Shallow zons - ~170 ft bgs. Top of Principal Aquifer - ~192 ft bgs.

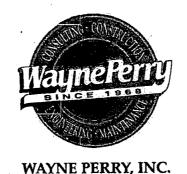
Nearest MTBE detection in drinking water production well; NB-TAMD: 0.12 ug/L in 2005. NB-TAMD: 0.04 ug/L in 2008,

EXHIBIT 58	Exhibit No. 60	Date: 8/21/08	Sandra Bunch, CSR 3032
tabbies.			

	ζ
-	Unocal #5/123 (aka Chevron #306621)
7	14972. Springdale Street. Huntington Beach
4 1	
9	Significant gw contain from site affeady migrated downgrao off site to the SVV, S, & SE by time gw pumping infrated.
ا ٥	- SVV site margin 'A' gw zone - MVV-5: S/1/34 DIPE 14 DOD ug/L.
	Site margin 'A' & 'B' gw zone - MW-10: 5/28/96 DIPE 12,000 ug/L; MTBE - 11,000 ug/L; TBA never tested.
∞	- SE site margin *A" gw zone - MW-20A; 3/10/99 DIPE 26,000 ug/L; benzene 7,300 ug/L.
6	
L	Site had multiple fuel leaks between 1987 and the present, including fuel leaks that were detected or identified in Jan-1990.
	Oct-1990, and May-1991; and discovered or indicated in Apr-1987 (soil contamination) and Jun-1987 (free product on my)
9	(Unocal, Business Plan, 7/3/98; ENSR, Well Installation Report, Jan-2005).
Ξ	
	Regulatory Appensy has issued at least 15 notifications to RP from 2/4/94 to 12/4/07 for inadequate or inaffactive investigations
: :-	work place former and remediation. A Notice of Violation (NOV) was instead in 1904 for any compatibular,
	won plans, reports, and centerlation. A nature of the state of the sta
5	מבייות במינות מות משל המינות ביותר ולה מינות המינות מינות מ
4 6	01.gW 01.site.
2	THE THE PARTY OF T
1	NO UST OF TACINEY INSPECTION RECOIDS WERE AVAILABLE TO THIS SITE.
Ĉ.	
9	Site has never been closed by regulatory agency.
17	
18	MTBE 1st tested in groundwater: 2/29/96 in MW-8.
19	MTBE 1st detected in groundwater; 2/29/96 in MNV-8 - 32,000 ug/t.
20	Max MTBE detected in a ow monitoring well: 2/29/96 in MV-8 - 32 000 uo/.
2	
22	TBA 1st tested in groundwater 3/2/04 in MW-26U
23	TBA 1st eletected in groundwater: 7/2004 in MAV-25U - 180 ug/L.
24	Max TBA detected in a row monitoring well: 1/26/05 in MMX-30i - 3 5/00 un/l
3,5	
3 %	3 caluated some are identified framenes the same are MOT distinctly exercise wases
2,00	Control of Collection of the Collection of the Collection of Collection
7	Setti-perched upper A gw zotre - ~ 10 to 13 it ags.
श्	semi-perched lower A gw zone - ~18 to 23 ft bgs.
Ş] (	semi-perched "B" gw zone - ∼30 to 40 ft bgs.
ချ	semi-perched "C" gw zone - ~40 to ~50 tt bgs.
3	Site monitoring wells are screened across the identified groundwater zones (Komex report).
3	
3	Farthest downgradient well MW-12 - (screened 5 to 25 ft bgs across "upper A" & "lower A" zones).
\$ 1	MI BE 1st tested 5/26/95.
3	INTEE 1ST DEFECTED DIVING - 15 UDT.
ဗ္ဂ	Max MTBE detected 5/6/03 - 15 ug/L.
34	Farthest downgradient "B" zone well - MW-4B (located SE of site).
88	MTBE 1st tested 3/22/01.
33	MTBE last tested 8/29/03 - MTBE not detected; well inaccessible since 8/29/03 - covered by aschalt.
各	TBA never tested.
41	Farthest downgradient "C" zone well - MW-4C (located SE of site).
45	MTBE 1st tested 3/22/01.
43	MTBE 1st detected 2/21/02 - 0.86 ug/L.
44	Max MTBE detected 5/6/03 - 22 ug/L.
45	TBA 1st lested 3/2/04.
46	TBA last tested 11/1/07 - TBA not detected.
47	

Semi-perchad lurger A'zone gav Man direction fluctuals with no patient, overall SEE (Konneu report)	8	
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		Vertical gw gradient is generally downward, but occasionally upward between zones - question whether monitoring wells truly
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	1-	Dec.08: DPE stoned remained stoned for at least 1 year - current (Aug.03) status unknown
	IN	_
	l	MTBE and TBA groundwater plumes have migrated off site to SW to SE (1/14/08 ENSR - Querterly Groundwater
		Monitoring Report, Fourth Quarter 2007, Former Unocal Facility #5123 (Chevron Site ID 306621), 14972 Suringdale
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	- 6	INITIOE and TOA gw pluries have not been delineated ventically.
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Nea	n	Drilled to 650 ft bgs.
Nes	9	Screened_unknown_
Nes	~	pump rate - unknown - abandoned.
Nes	æ	
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	-1	rump rate - ∼/ s∪ gpm.
	V	Top of Shallow zone - ~51 ft bgs.
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	10	
	<b>F</b>	

HB-13; 0.17 ug/L in 2005 (LIMS)



Environmental Remediation, Construction and Consulting

November 5, 2010

Orange County Health Care Agency Department of Environmental Health Hazardous Materials Management Section 1241 East Dyer Road, Suite 120 Santa Ana, California 92705-5611

Attn: Geniece Higgins

SUBJECT: GROUNDWATER MONITORING AND STATUS REPORT

THIRD QUARTER 2010

FORMER SHELL SERVICE STATION 6502 BOLSA AVENUE (at Edwards Street) HUNTINGTON BEACH, CALIFORNIA

OCHCA CASE: 87UT23 WPI FILE: 09.610 SAP CODE: 135368

### Dear Ms. Higgins:

Wayne Perry, Inc. (WPI), on behalf of Equilon Enterprises LLC dba Shell Oil Products US (Shell), is submitting this Quarterly Groundwater Monitoring Report. This report includes a summary of site activities, a description of the groundwater monitoring activities, tables, and figures showing the groundwater data, and copies of the field data sheets, and analytical report.



November 5, 2010 Former Shell Service Station 6502 Bolsa Avenue Page 4

If you have any questions regarding this report, please contact Mr. Michael Wielenga of WPI at (714) 826-352. If you have any questions regarding the Blaine Tech Services, Inc. field data, please contact Mr. Francis Thie at (408) 573-555. If you have any questions regarding this project, please contact Mr. Chris McDonald of WPI at (714) 826-352 or Mr. Marvin Katz of Shell at (310) 550-5846.

MICHAEL WIELENGA No. 7900

Sincerely,

WAYNE PERRY, INC.

Michael Wielenga

California Professional Geologist 7900

Attachments: Summary of Site Activities

Figure 1, Site Location Map

Figure 2, Plot Plan

Figure 3, Groundwater Elevation Map

Figure 4, Hydrocarbon Distribution Map

Figure 5, TPPH Concentration Map

Figure 6, Benzene Concentration Map

Figure 7, MTBE Concentration Map

Figure 8, TBA Concentration Map

Figure 9, DIPE Concentration Map

Table 1, Current Groundwater Data

Table 2, Historical Groundwater Data

Table 3, Additional Groundwater Data

Graphs 1 through 17, TPH-G, Benzene, MTBE, and TBA Concentrations and Groundwater Elevations versus Time

Appendix A, Blaine Tech Services, Inc. Field Data Sheets and Laboratory Analytical Report with Chain-of-Custody Documentation

Appendix B, Site History

TABLE 2
HISTORICAL GROUNDWATER DATA
FORMER SHELL SERVICE STATION
6502 Bolsa Avenue, Huntington Beach

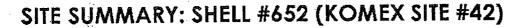
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TABLE 2 ...
HISTORICAL GROUNDWATER DATA
FORMER SHELL SERVICE STATION
6502 Bolsa Avenue, Huntington Beach

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Top of casing elevation (ft): 19.11						35 30	05.5	25.11	25.31		25.80	;	25.01	61.67							Ton of engine slaveston (ft): 31 13	25.21	25.26	25.16	25.00	25.05	,	25.65	74.61	24.30	24.86	24.86	25.05	25.09	25.13	25.10	25.02	24.95	25.05	25.07	:	Top of casing elevation (ft): 21.25	25.12	52.63	23.12	25.10	0000
Top of casi						71.7	05.1	15.31	15.28		14.31	;	12.36	17.00							Ton of soci	13.69	13.78	17.53	17.12	16.78	:	15.46	14.09	14.41	13.06	15.55	15.50	14.80	14.15	15.48	15.58	14.76	. 10.91	17.85	,	Top of casi	0.00	10.77	96.90	17.36	
						. :	0.00	0.00	0.00		000	;	0.00	3								8	0.00	8	00.00	0.00		3 8	86	3 8	000	8	0.00	00.0	00.0	00.0	8	00:	8:	000		8	0.00	9.8	90.	0.00	
									3.83 0		4.80			0.51								753				4.35 0				7/0					•		5.55			3.28			. •		4.29		
00,000	04/77/70	10/10/10	16/15/10	100070	10//04/91										04/11/94	03/18/99	66/77	66/87/60	66/63	03/20/00	90/90	7 00/90/00								05/06/02 6.			05/29/03 5.			02/04/04 5.		08/03/04 6	10/25/04 5		35/11/05			•			
. 8	7/70	5/10	2/10	5 5	2 5	171	7/01	0/10	04/0	96	06/2	07/1	701	770	25 25	03/1	7/00	7/65	7/7	03/7	3	0/00	17/1	03/1	0/90	1/60	1/60	572	770	760	10/2	03/0	05/2	9/80	9/11	07/0	02/0	9/80	10/2	07/0	1/50	9	7/60	7/1	02%	05/3	101000

TABLE 2
HISTORICAL GROUNDWATER DATA
FORMER SHELL SERVICE STATION
6502 Bolsa Avenue, Huntington Beach

																							-																							Exceeded hold time for 8015/8020	220000000000000000000000000000000000000		<b>ጎ</b>		
<b>3</b>																																														Exceeded hol	TYPE TO THE TOTAL				
(LE)	ND~20	ND<10	ND-20	ND<20	ND<20	ND<20	ND~20	ND<20	ND<2.0	ND<20	ND:20	ND ND ND ND ND ND ND ND ND ND ND ND ND N	ND<10	ND×10				•							,																										
(ag/L)	ND<20	ND<10	ND<20	ND<20	ND<20	ND-20	ND<20	ND<20	ND~2.0	ND<20	ND<20	ND<10	NDA10	NDV10								•																						٠							
(ng/L)	100	0091	280	069	880	1100	730	540	1000	850	820	290	870	1200						•																															
(ug/L)	ND<200	ND<180	ND-200	ND<100	ND<100	ND<100	ND<100	ND<100	45	ND-100	ND<100	110	99	20 20 20 20 20 20 20 20 20 20 20 20 20 2																														1							
8260 (ng/L)	ND<20	12	ND<20	ND<10	ND<10	4	13	ND<10	=	ND<10	ND<10	7.6	7.1	5.5						ì									•						•												N N	Š			
8020/8021 (ug/L)							•												1													,					;	NDX10	ND<10	NDSIO	NDV I		NO.	27.0		מוילוא	15.9	25.6 NDA	<u>}</u> =	=	•
XVLENES (ag/L)	ND-20	ND<10	ND~20	ND<10	ND<10	ND<10	ND<10	ND<10	ND<1.0	ND<10	ND<10	ND<5.0	ND<5.0	ND<5.0		2	7 !	200	NDV.	Z Z	S S S	ND-2	2.9	8.0	ND<0.6		ND<0.6		ND<0.5	2.5	200	0.0	9,0	ND<0.6	ND<0.6	ND<0.6	ND<0.6	1.6	ND<0.5	60	2000 2000 2000 2000 2000 2000 2000 200	N 200.5	ND-CO.S	N S S S S S S S S S S S S S S S S S S S	20.0	NLV-0.0	Andre	. 0.0V	טינ אַרוא	NUSU.	
BENZENE (ng/L)	ND×10	ND<5.0	ND<10	ND<10	ND<10	ND<10	ND<10	ND<10	ND<1.0	ND<10	ND<10	ND<5.0	ND<5.0	ND<5.0	mengun	NO.	Z N	ND S	NDZ3	Z Z	ND-2	ND-2	ND<0.3	ND<0.3	ND<0.3		ND<0.3	;	ND 0.3	ND-0.3	NP-0-3	N COUNTY	ND<0.3	ND<0.3	ND<0.3	ND<0.3	ND<0.3	1.7	ND C0.3	0.0	ND<0.3	ND<0.3	ND-CO.	200	NING S	2.75 2.75 2.75	,	. 6	יי קיי	N V	•
(ag/L) (ag/L)	ND<10	ND<5.0	ND<10	ND<10	ND<10	ND:10	ND<10	ND<10	ND<1.0	ND<10	ND<10	ND-5.0	ND<5.0	ND<5.0	reen Interval	MINE VAL. MINES	Z :	Z Z	Z N	Z Z	ΣŽ	Z Z Z	ND<0.3	0.4	ND<0.3		ND<0.3		ND<0.3	C.O. 1		. 50	ND<0.3	ND<0.3	ND<0.3	ND<0.3	ND<0.3	0.5	ND CO.3	ND-0.3	NDX0.3	ND-03	ND<0.3	ND CO.	ND<0.3	ND<0.3	0	× •	4:1 4:7:3	ND<0.3	
(ag/L)	ND<10	ND<5.0	ND<10	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	3.0	ND<5.0	ND<5.0	2.6	ND<2.5	ND<2.5	J			ND<0.5	ND<0.5	ND-0.5	ND<0.5	ND<0.5	ND<0.3	ND<0.3	ND<0.3		ND-0.3		2.1	NO. 6		200	ND<0.3	ND<0.3	ND-0.3	ND<0.3	ND<0.3	3.4	ND<0.3	0.3	ND-0.3	ND<0.3	ND-03	ND-03	ND<0.3	ND<0.3		0.0	ن در: در در:	ND-CL.3	
(T/fin)				1200	1600	1900	1200	1100	0001	1400	1300	1300	1200	1700																		•														•	•		-		
(ng/L) (ug/L)	1100	1400	ND<1000												16.31	1001	ND<50	ND<50	901	ND<50	901	8	ND<500	ND<500	ND<500		ND<500		ND<500	ND<500	00000	ND/500	ND<500	ND-SOG	ND<500	ND<500	ND<500	000 CO.	ND<500	ND<500	903/01/	ND 2500	NU-SOU	ND<500							
DEPTH (feet)	25.00	25.15	25.22	25.19	25.20	25.15	25.19	25.19	25.18	25.20	25.71	25.21	25.50	25.48	Ton of coston elmoston (8): 19.31	ng elevation (i							35.29	35.11	35.18		35.10		34.99	35.02	35.04	35.02	34.97	34.97	34.94	35.02	35.04	35.02	35.00	34.95	34.88	34.88	34.94	3.5	34.98	34.98	34.93	34.96	34.92	34.98	
(feet relative to MSL)	16.60	15.60	15.52	15.88	15.64	15.24	16.20	15.92	15.24	14.59	15.04	16.36	16.42	15,21	Ton of cost	l ob or cass							9.46	10.51	15.20		12.26		8.57	13.82	19:13	0/11	16.65	15.53	12.91	10.66	13.14	16.04	11.66	10.34	14.13	15.41	10.66	9.80	13.12	15.91	12.44	10.24	14.47	14.28	
THICKN. (feet)	900	000	000	0.00	0.00	0.00	0.00	000	0.00	000	000	0.00	0.00	000	,					٠.	-		0.00	00.0	000		00.0		0.00	0.00	00.00	3 8	80	0.00	000	00:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	000	0.00	000	000	0.00	0.0	
FG CW	465	5.65	5.73	5.37	19:5	10'9	5.05	5.33	6.01	99'9	6.21	4.89	4.83	6.04					٠				8.85	7.80	3.11				9.74	4.49	2.18	6.55	. yg	2.78	5.40	7.65	5.17	227	6.65	7.97	4.18	2.90	7.65	8.51	5.19	2.40	5.87	8.07	3.84	4.03	
	20/01/50	08/29/07	12/10/07	03/25/08	04/25/08	09/22/08	12/31/08	03/24/09	06/11/00	60/11/60	12/22/09	03/10/10	06/28/10	09/22/10			02/22/90	10/10/90	16/18/10	04/30/91	07/09/91	12/12/91	10/20/92	01/06/93	04/05/93	06/06/93	06/21/93	07/14/93	10/11/93	01/13/94	Z/11/20	07/15/94	01/24/95	04/12/95	07/07/95	09/22/95	12/19/95	03/27/96	06/25/96	96/97/60	12/13/96	04/16/97	07/25/97	16/91/01	12/01/97	04/28/98	07/01/98	09/10/98	12/28/98	03/18/69	
															;	87-Q						,			·									•																	



#### GENERAL SITE INFORMATION

Site Address:

6502 Bolsa Avenue, Huntington Beach, CA

Current Site Operation:

Former gas station (closed first quarter 2000 - OCHCA 041729)

#### KEY ISSUES

- Methyl tert-butyl ether (MTBE) was released at the Site prior to March 1996 and can be traced from the source to groundwater beneath the Site. Groundwater contamination was never hydraulically contained and the historical extent of MTBE and tert-butyl alcohol (TBA) plumes was never fully delineated.
- The contamination has migrated off-Site at least 150 feet to the west and south. The
  vertical extent of contamination beneath the Site has not been investigated below 35 feet
  below ground surface (bgs). One monitoring well has been installed deeper that 35 feet
  bgs: B-48C, located 150 feet east of the Site and screened from 45 to 50 feet bgs. MTBE
  and TBA have not been detected in this well.
- Several phases of soil and groundwater remediation have been undertaken at the Site.
   However, dissolved phase MTBE and TBA plumes remain beneath and off the Site.
   Many on-Site monitoring wells have been abandoned to facilitate redevelopment, despite the fact that MTBE and TBA were still detected in the wells.
- Production well HB-I is located about 1,750 feet west of the Site, in a direction that is
  down-gradient of recent groundwater flow from the Site. The well is screened from 258
  to 297 feet bgs, but it is not believed to have a sanitary seal, which could allow
  contamination in the Semi-Perched aquifer to enter the well.

#### HYDROGEOLOGY

The site is located within the pressure area of the Orange County Groundwater Basin (Figure 1 / Figure 2).

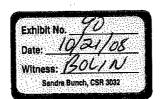
A cluster of three wells (B-48A, B-48B, and B-48C) installed at the Site were completed in three discrete groundwater-bearing zones (Figure 3). However, it should be noted that some monitoring wells installed earlier at the Site are screened across two of these zones. Furthermore, details of the screened intervals of monitoring wells B-7 through B-23 are

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KOMEX

USA. CANADA, UK AND WORLDWIDE





OCWD-MTBE-001-131295

### Deposition of Edward Saad / August 16, 2010

		Page 1
1	UNITED STATES DISTRICT COURT	1 496 -
2	SOUTHERN DISTRICT OF NEW YORK	
3		
4	ORANGE COUNTY WATER )	
5	DISTRICT, )	
6	Plaintiff, )	
7	vs. ) Case No. 04 CIV. 4968	
	UNOCAL CORPORATION, et al.,	
8	Defendants. )	
9		· .
10		
11		
12		
13		
14	DEPOSITION OF EDWARD SAAD	
15	AUGUST 16, 2010	
16	FOUNTAIN VALLEY, CALIFORNIA	
17		
18		
19		
20		
21	EXHIBIT	
22	Reported by: DEBORAH MORIN,	
23	CSR NO. 11558	
24		
25		

## Deposition of Edward Saad / August 16, 2010

<del></del>			0 76
	Page 74		Page 76
1	Q Did you have an understanding if the tanks	1	record at 11:41. This is?
2	were old and the piping was old when you took over	2	A Disk 3 of the deposition of Mr. Edward
3	the station?	3	Saad.
4	A Yes, original. He told me that. It's a	4	BY MS. O'REILLY:
5	steel tank. That's why I know it's a steel tank	5	Q Now we're going to talk about the Texaco
6	because he told me so.	6	station at Warner and Bushard. I think the address
7	Q So it was the original steel tank and	7	was 9475 Warner.
8	piping that had first been put in the station?	8	A Yes.
9	A Correct.	9	MR. DAVIS: I'm sorry. Could you read
10	Q Okay. Did you have an understanding of	10	back the address? I'm sorry. I didn't get that.
11	when the first the station was first operated to	11	MS. O'REILLY: 9475 Warner.
12	sell gasoline?	12	MR. DAVIS: Thank you.
13	A No.	13	BY MS. O'REILLY:
14	Q More than ten years?	14	Q And you previously testified you thought
15	A I really don't know. It used to be Arco.	15	you took it over in about 1992 and that you signed a
16	He told me used to be an Arco independent whoever	16	dealer agreement with Texaco; is that correct?
17	was pumping over there.	17	A Yes.
18	Q Other than the drive off, did any	18	Q Do you still have a copy of that dealer
19	customers drop the nozzles, the gasoline nozzles on	19	agreement?
20	the ground while they were filling up the car?	20	A I don't know. I didn't try to look on
21	A No. Most of the customer, we used to go	21	that location.
22	pump their gas ourself. Wasn't the self-service	22	Q Okay. And when you took over the station,
23	type deal.	23	you were the person primarily operating the station?
24	Q When you took the nozzle out of the gas	24	A Well, I was the one primary there, yes.
25	pumps, did a few drops of gasoline drip on the	25	Q And did you have employees helping you at
	parrips, and a rest drops of gasenine arip on and		
	Page 75		Page 77
1	ground?	1	that station?
2	A No.	2	A Yes.
3	Q When you did inventory on the tanks, do	3	Q And who was working with you?
4	you recall seeing the soil was wet around the top of	4	A A guy by name Pascal used to work the
5	the tank? I think we talked about that.	5	afternoon shift.
6	A Yes.	6	Q I'm sorry. His name was?
7	Q Did it happen from the time you took	7	A Pascal.
8	over the station, did you see that the soil was wet?	8	Q Pascal?
9	A Well, I didn't open the tank area, but	9	A Yeah. P-a-s-c-a-l.
10	every time he come to put gas, you can see the color	10	Q Do you recall his last name?
11	of the soil is different and you can smell, and	11	A Chevallier.
LII	OF THE BOX IS UNITED AND YOU CALL SHIGH, AND		
		117	
12	possibly because every time they put the hose and	12	Q Okay.
12 13	possibly because every time they put the hose and they don't seal tight, something leak. And then	13	<ul><li>Q Okay.</li><li>A And myself and one Asian lady used to work</li></ul>
12 13 14	possibly because every time they put the hose and they don't seal tight, something leak. And then after that leak that guy did on my time, I don't	13 14	Q Okay.  A And myself and one Asian lady used to work for the same employee used to work for the
12 13 14 15	possibly because every time they put the hose and they don't seal tight, something leak. And then after that leak that guy did on my time, I don't know how many time did that.	13 14 15	Q Okay.  A And myself and one Asian lady used to work for the same employee used to work for the company, for Texaco. I forget her name. And that's
12 13 14 15 16	possibly because every time they put the hose and they don't seal tight, something leak. And then after that leak that guy did on my time, I don't know how many time did that.  MS. O'REILLY: All right. Let's take a	13 14 15 16	Q Okay. A And myself and one Asian lady used to work for the same employee used to work for the company, for Texaco. I forget her name. And that's it.
12 13 14 15 16 17	possibly because every time they put the hose and they don't seal tight, something leak. And then after that leak that guy did on my time, I don't know how many time did that.  MS. O'REILLY: All right. Let's take a quick break and then we'll move to the Texaco	13 14 15 16 17	Q Okay. A And myself and one Asian lady used to work for the same employee used to work for the company, for Texaco. I forget her name. And that's it. Q Okay. The woman who worked for was she
12 13 14 15 16 17 18	possibly because every time they put the hose and they don't seal tight, something leak. And then after that leak that guy did on my time, I don't know how many time did that.  MS. O'REILLY: All right. Let's take a quick break and then we'll move to the Texaco station.	13 14 15 16 17 18	Q Okay. A And myself and one Asian lady used to work for the same employee used to work for the company, for Texaco. I forget her name. And that's it. Q Okay. The woman who worked for was she employed by Texaco to your understanding?
12 13 14 15 16 17 18 19	possibly because every time they put the hose and they don't seal tight, something leak. And then after that leak that guy did on my time, I don't know how many time did that.  MS. O'REILLY: All right. Let's take a quick break and then we'll move to the Texaco station.  THE WITNESS: On Fountain Valley?	13 14 15 16 17 18 19	Q Okay. A And myself and one Asian lady used to work for the same employee used to work for the company, for Texaco. I forget her name. And that's it. Q Okay. The woman who worked for was she employed by Texaco to your understanding? A Before I took over, yes.
12 13 14 15 16 17 18 19 20	possibly because every time they put the hose and they don't seal tight, something leak. And then after that leak that guy did on my time, I don't know how many time did that.  MS. O'REILLY: All right. Let's take a quick break and then we'll move to the Texaco station.  THE WITNESS: On Fountain Valley?  MS. O'REILLY: Yes. Yeah. We'll take a	13 14 15 16 17 18 19 20	Q Okay. A And myself and one Asian lady used to work for the same employee used to work for the company, for Texaco. I forget her name. And that's it. Q Okay. The woman who worked for was she employed by Texaco to your understanding? A Before I took over, yes. Q But she worked at the station?
12 13 14 15 16 17 18 19 20 21	possibly because every time they put the hose and they don't seal tight, something leak. And then after that leak that guy did on my time, I don't know how many time did that.  MS. O'REILLY: All right. Let's take a quick break and then we'll move to the Texaco station.  THE WITNESS: On Fountain Valley?  MS. O'REILLY: Yes. Yeah. We'll take a quick break, and then we'll go to that station.	13 14 15 16 17 18 19 20 21	Q Okay. A And myself and one Asian lady used to work for the same employee used to work for the company, for Texaco. I forget her name. And that's it. Q Okay. The woman who worked for was she employed by Texaco to your understanding? A Before I took over, yes. Q But she worked at the station? A She was working at the station, yes.
12 13 14 15 16 17 18 19 20 21 22	possibly because every time they put the hose and they don't seal tight, something leak. And then after that leak that guy did on my time, I don't know how many time did that.  MS. O'REILLY: All right. Let's take a quick break and then we'll move to the Texaco station.  THE WITNESS: On Fountain Valley?  MS. O'REILLY: Yes. Yeah. We'll take a quick break, and then we'll go to that station.  THE VIDEOGRAPHER: Going off the record at	13 14 15 16 17 18 19 20 21 22	Q Okay. A And myself and one Asian lady used to work for the same employee used to work for the company, for Texaco. I forget her name. And that's it. Q Okay. The woman who worked for was she employed by Texaco to your understanding? A Before I took over, yes. Q But she worked at the station? A She was working at the station, yes. Q When you took over the station, was Texaco
12 13 14 15 16 17 18 19 20 21 22 23	possibly because every time they put the hose and they don't seal tight, something leak. And then after that leak that guy did on my time, I don't know how many time did that.  MS. O'REILLY: All right. Let's take a quick break and then we'll move to the Texaco station.  THE WITNESS: On Fountain Valley?  MS. O'REILLY: Yes. Yeah. We'll take a quick break, and then we'll go to that station.  THE VIDEOGRAPHER: Going off the record at 11:27.	13 14 15 16 17 18 19 20 21 22 23	Q Okay. A And myself and one Asian lady used to work for the same employee used to work for the company, for Texaco. I forget her name. And that's it. Q Okay. The woman who worked for was she employed by Texaco to your understanding? A Before I took over, yes. Q But she worked at the station? A She was working at the station, yes. Q When you took over the station, was Texaco itself operating the station to your understanding?
12 13 14 15 16 17 18 19 20 21 22	possibly because every time they put the hose and they don't seal tight, something leak. And then after that leak that guy did on my time, I don't know how many time did that.  MS. O'REILLY: All right. Let's take a quick break and then we'll move to the Texaco station.  THE WITNESS: On Fountain Valley?  MS. O'REILLY: Yes. Yeah. We'll take a quick break, and then we'll go to that station.  THE VIDEOGRAPHER: Going off the record at	13 14 15 16 17 18 19 20 21 22	Q Okay. A And myself and one Asian lady used to work for the same employee used to work for the company, for Texaco. I forget her name. And that's it. Q Okay. The woman who worked for was she employed by Texaco to your understanding? A Before I took over, yes. Q But she worked at the station? A She was working at the station, yes. Q When you took over the station, was Texaco itself operating the station to your understanding? A Yes.

### Deposition of Edward Saad / August 16, 2010

	Page 114		Page 116
1	auto and truck repair in Santa Ana?	1	MS. O'REILLY: Vague and ambiguous.
2	MR. DAVIS: Yes.	2	Overbroad.
3	THE WITNESS: About twice a month.	3	THE WITNESS: Yes.
	BY MR. DAVIS:	4	BY MR. DAVIS:
4		5	Q Did you always understand that it was
5	Q Do you know who was responsible for		important not to let gasoline to go into the
6	maintaining the tanks at that site?	6	important not to let gasonne to go into the
7	A No.	7	environment and get into the water table? Did you
8	Q For this site at 9475 Warner, do you ever	8	always understand that?
9	recall any spills of gasoline at that site?	9	MS. O'REILLY: Vague and ambiguous.
10	A No.	10	Overbroad. Lacks foundation.
11	MS. O'REILLY: Asked and answered.	11	THE WITNESS: Yes.
12	BY MR. DAVIS:	12	BY MR. DAVIS:
13	Q Do you ever recall any leaks of any kind	13	Q And you did everything in your power to
14	at that site?	14	prevent gasoline from getting into the water table;
	MS, O'REILLY: Asked and answered.	15	right?
15		16	A Yeah.
16	THE WITNESS: No.		MS. O'REILLY: Vague and ambiguous.
17	BY MR. DAVIS:	17	<del></del>
18	Q During the entire time you worked as a	18	Overbroad.
19	station operator, was it always your intention to	19	THE WITNESS: Yes.
20	follow all the rules and regulations and laws?	20	BY MR. DAVIS:
21	MS. O'REILLY: Vague and ambiguous.	21	Q And you knew that that was important
22	Overbroad.	22	during the entire time you operated gasoline
23	BY MR. DAVIS:	23	stations?
24	Q You can answer.	24	MS. O'REILLY: Same objections.
25	A Yes.	25	THE WITNESS: Yes.
			· · · · · · · · · · · · · · · · · · ·
	Page 115		Page 117
1	Q And was it always your intention that your	1	BY MR. DAVIS:
2	employees would do the same?	2	Q For the station at 9475 Warner, do you
3	MS. O'REILLY: Same objections.	3	have any information that Chevron ever supplied
4	THE WITNESS: Yes.	4	gasoline to that station?
	BY MR. DAVIS:	5	MS. O'REILLY: Calls for speculation.
5			THE WITNESS: No.
6	Q And it was always your intention to keep	6	
7	gasoline safety stored; is that right?	7	BY MR. DAVIS:
8	MS. O'REILLY: Vague and ambiguous.	8	Q Do you have any information that Unocal
9	Overbroad.	9	ever supplied gasoline to that station?
10	THE WITNESS: Yes.	10	MS. O'REILLY: Calls for speculation.
11	BY MR. DAVIS:	11	Lacks foundation.
12	Q Do you understand that gasoline is a	12	THE WITNESS: No.
13	dangerous product?	13	BY MR. DAVIS:
14	MS. O'REILLY: Vague and ambiguous.	14	Q Do you have any information that Union Oil
15	Overbroad.	15	Company of California ever supplied gasoline to that
16	THE WITNESS: Yes.	16	station?
17	BY MR. DAVIS:	17	MS. O'REILLY: Same objections.
	Q And you understood that for the entire	18	THE WITNESS: No.
18		19	MR, DAVIS: I'll pass the witness.
19	time that you were operating gasoline stations; is		MS. O'REILLY: Does anybody else have any
1 22		20	
20	that right?	24	auactions?
21	MS. O'REILLY: Same objections.	21	questions?  MD_ARRAMS: This is Louis Abrams I have
21 22	MS. O'REILLY: Same objections. THE WITNESS: Yes.	22	MR. ABRAMS: This is Louis Abrams. I have
21 22 23	MS. O'REILLY: Same objections. THE WITNESS: Yes. BY MR. DAVIS:	22 23	MR. ABRAMS: This is Louis Abrams. I have no questions.
21 22 23 24	MS. O'REILLY: Same objections. THE WITNESS: Yes. BY MR. DAVIS: Q And you always understood that gasoline	22 23 24	MR. ABRAMS: This is Louis Abrams. I have no questions. MS. O'REILLY: Anyone else on the
21 22 23	MS. O'REILLY: Same objections. THE WITNESS: Yes. BY MR. DAVIS:	22 23	MR. ABRAMS: This is Louis Abrams. I have no questions.



WAYNE PERRY, INC.
Environmental Remediation, Construction and Consulting

November 4, 2010

Orange County Health Care Agency Department of Public and Environmental Health Hazardous Materials Management Section 1241 East Dyer Road Santa Ana, CA. 92705-5611

Attention: Tamara Escobedo

SUBJECT: GROUNDWATER MONITORING AND STATUS REPORT

THIRD QUARTER 2010

FORMER TEXACO SERVICE STATION 9475 WARNER AVENUE (at Bushard Street)

FOUNTAIN VALLEY, CALIFORNIA

OCHCA CASE: 95UT033 SAP CODE: 121681 WPI PROJECT: 09.628

Dear Ms. Escobedo:

Wayne Perry, Inc. (WPI), on behalf of Equilon Enterprises LLC dba Shell Oil Products US (Shell), is submitting this Quarterly Groundwater Monitoring Report. This report includes a description of the groundwater monitoring activities, tables, figures showing groundwater data, copies of field data sheets, and analytical reporting.

November 4, 2010 Former Texaco Service Station 9475 Warner Avenue Page 3

Groundwater gauging and sampling activities were performed by Blaine Tech Services, Inc. WPI does not accept responsibility as to the accuracy of the Blaine Tech Services, Inc. data.

If you have any questions regarding this report, please contact Mr. Michael Wielenga of WPI at (714) 826-0352. If you have any questions regarding the Blaine Tech Services, Inc. field data, please contact Mr. Francis Thie at (408) 573-0555. If you have any questions regarding this project, please contact Mr. Chris McDonald of WPI at (714) 826-0352 or Mr. Marvin Katz of Shell at (310) 550-5846.

MICHAEL WIELENGA No. 7900

Sincerely,

WAYNE PERRY, INC.

Michael Wielenga

California Professional Geologist 7900

Attachments: Summary of Site Conditions

Figure 1, Site Location Map

Figure 2, Plot Plan

Figure 3, Groundwater Elevation Contour Map

Figure 4, Hydrocarbon Distribution Map

Figure 5, TPPH Concentration Map

Figure 6, MTBE Isoconcentration Map

Figure 7, TBA Isoconcentration Map

Table 1, Current Groundwater Data

Table 2, Historical Groundwater Data

Appendix A, Blaine Tech Services, Inc. Groundwater Monitoring Report and Laboratory Analytical Report with Chain-of-Custody Documentation

Appendix B, Site History

cc: Mr. Marvin Katz, Shell Oil Products US

Page 1 of 8

WELL TPH-G TPPH TPH-D BENZENE TOLUENE TO DEPTH (Ug/L) (Ug/L) (Ug/L) (Ug/L)	SPH GW ELEV WELL TPH-G TPPH TPH-D BENZENE TOLUENE THICKN (frest islative DEPTH (Ug/L) (Ug/L) (Ug/L) (Ug/L) (Ug/L) (Ug/L)	WELL TPH-G TPPH TPH-D BENZENE TOLUENE e DEPTH (1/2/L) (1/2/L) (1/2/L) (1/2/L) (1/2/L)	WELL TPH-G TPPH TPH-D BENZENE TOLUENE e DEPTH (1/2/L) (1/2/L) (1/2/L) (1/2/L) (1/2/L)	WELL TPH-G TPPH TPH-D BENZENE TOLUENE DEPTH (feet) (Lg/L) (Lg/L) (Lg/L) (Lg/L)	TPPH TPH-0 BENZENE TOLUENE (Hg/L) (Hg/L) (Hg/L)	TPH-D BENZENE TOLUENE (1997.) (1997.)	BENZENE TOLUENE (Hg/L)			EAH BENZ EAG	Y.L.	TOTAL XYLENES (µg/L)	MTBE 8020(1) (Mg/L.)	MTBE (µg/L)	TBA (µg/L)	(hg/L)	ETBE (µg/L)	TAME (µg/L)	COMMENTS
Casing elevation (ft): 32.79   Color	Screen interval: 8 to 23 <-0.3 <-0.3 <-0.3 <-0.3 <-1.0 <-1.0 <-1.0 <-1.0 <-1.0 <-1.0 <-1.0 <-1.0 <-1.0 <-1.0 <-1.0 <-1.0 <-1.0 <-1.0 <-1.0 <-1.0 <-1.0 <-1.0 <-1.0	Screen interval: 8 to 23 <-0.3 <-0.3 <-0.3 <-0.3 <-1.0 <-1.0 <-1.0 <-1.0 <-1.0 <-1.0 <-1.0 <-1.0 <-1.0 <-1.0 <-1.0 <-1.0 <-1.0 <-1.0 <-1.0 <-1.0 <-1.0 <-1.0 <-1.0	Screen interval: 8 to 23 <-0.3 <-0.3 <-0.3 <-0.3 <-1.0 <-1.0 <-1.0 <-1.0 <-1.0 <-1.0 <-1.0 <-1.0 <-1.0 <-1.0 <-1.0 <-1.0 <-1.0 <-1.0 <-1.0 <-1.0 <-1.0 <-1.0 <-1.0	Screen interval: 8 to 23  40.3 40.3 40.4 1.8 40.3 40.3 40.3 40.3 40.3 40.3 40.3	Screen interval: 8 to 23  40.3 40.3 40.4 1.8 40.3 40.3 40.3 40.3 40.3 40.3 40.3	\$ 10 23 40.3 1.8 0.78 1.3 40.3 40.3 40.3 40.3 40.3 40.3	\$ 10 23 40.3 1.8 0.78 1.3 40.3 40.3 40.3 40.3 40.3 40.3	\$ 10 23 40.3 1.8 0.78 1.3 40.3 40.3 40.3 40.3 40.3 40.3	\$ 10 23 40.3 1.8 0.78 1.3 40.3 40.3 40.3 40.3 40.3 40.3		6.6 8.6 8.6 8.6		41 35 830 4100 3100	•					
7.83 0.00 24.86 800 40.3 5.6 40.3 8.78 0.00 23.01 1350 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.	7.53 0.00 24.86 800 40.3 5.6 40.3 8.78 0.00 23.01 1350 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.	24.86         800         40.3         5.6         40.3           23.01         1380         40.3         40.3         40.3           22.05         23.71         290         40.3         40.3         40.3           22.36         23.88         1120         40.3         40.3         40.3	800 40.3 5.6 40.3 1350 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.	800         40.3         5.6         40.3           2139         40.3         40.3         40.3           2870         40.3         40.3         40.3           280         40.3         40.3         40.3           1120         40.3         40.3         40.3	40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3	6.5 6.3 6.3 6.3 6.3 6.3 6.3 6.3 6.3 6.3 6.3	6.5 6.3 6.3 6.3 6.3 6.3 6.3 6.3 6.3 6.3 6.3	6.5 6.3 6.3 6.3 6.3 6.3 6.3 6.3 6.3 6.3 6.3	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$		8 8 8 8 8	<b>&amp; &amp; &amp; &amp; &amp; &amp;</b>	5000 17000 23800 11500 4200	12800					No purge semple
11.71 0.00 21.08 23.68 1700	11.71 0.00 21.08 23.68 1700	21.08 23.08 1000 1.7 0.6 22.18 23.77 5400 0.5 <0.3 <0.3	23.08 1700	5500 1,7 0.6 5500 1,7 0.6 5500 0.5 <0.3 <0.3	1.7 0.6 0.5 <0.3 <0.3	9 6 6 9 6 6	9 6 6 9 6 6	9 6 6 9 6 6		8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00		6.6 6.8	15000 30000 18000	19000 41000 16000	•				No purge sample No purge sample No purge sample
### 19.51 23.74 5600 0.4 <-0.3   19.51 23.89 14000 <-10 <-0 <-0 <-0 <-0 <-0 <-0 <-0 <-0 <-0 <-	Top of cesting elevation (#): 32.02 12.51 0.00 19.51 23.74 5600 0.4 <0.3 12.61 0.00 19.53 23.69 14000 <10 <20 12.49 0.00 18.53 23.69 14000 <10 <20 12.49 0.00 18.53 23.99 14000 <10 <20	ation (Ht): 23,02  19,51  23,74  5600  0.4  40,3  19,53  23,69  140,00  20  140,00  20  20  20  20  20  20  20  20  20	23.74 5600 0.4 <0.3 23.69 14000 <10 <20 23.70 200 <000 <200	5600 0.4 <0.3 14000 <10 <20 20 20 20 <20 20 20 20 20 20 20 20 20 20	0.4 <0.3 <10 <20 <100 <200	8. 50 80 8. 50 80 80 80 80 80 80 80 80 80 80 80 80 80 80 80 80 80 80 8	8. 50 80 8. 50 80 80 80 80 80 80 80 80 80 80 80 80 80 80 80 80 80 80 8	8. 50 80 8. 50 80 80 80 80 80 80 80 80 80 80 80 80 80 80 80 80 80 80 8		60.3 200 200		<0.6 <40 <400	11000	21000 17000 21000	16000	440 045	4400 4400	4 4 904	No purge sample No purge sample No purge sample
11.91	11.09 0.00 21.31 23.70 18000 <100 <200 11.09 0.00 20.11 23.70 2000 <100 <100 <200 <10 <10 <10 <10 <10 <10 <10 <10 <10 <	20.94 23.70 18000 <10 <200 <200 <200 <200 <200 <200 <2	23.70 19500 <100 <200 23.70 2500	1900 < 200 ·	400 620 620 620 620 620 620 620 620 620 6	8 2 €	8 2 €	8 2 €		65 ± €		음 4 음		26000 33000 32000	15000 25000 12000	84 6 8 8 6 8	<b>4</b> 6 8	6 1 ± ≤	No purge sample No purge sample
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10p of Eahing Behaviorn (14, 25, 26)   10p of Eahing Behaviorn (14, 25, 26)   15,08   23,70   8800   31 J   <100 <100   1204/02   13,88   0.00   15,90   23,70   <2800   <25   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50   <50	10p or czaling sevation (14, 59, 50 14, 50 0.00 15,08 23,70 82600 31, J <100 13,68 0.00 15,90 23,70 <25600 <25 <50	15.08 23.70 8600 31.J <100 15.90 23.70 <2500 <25 <50	23.70 9800 31.J <100 23.70 <2900 <25 <50	9800 31 <100 <2500 <250 <50	31 J <100 <25 <50	450 650	450 650	450 650	+,	^100 550		4100 650		2000	31000	420 4100	420 400 400	<200 <100 <100	No purge sample No purge sample Well Abandoned Well Abandoned
	Top of cashing elevation (fit): 32.24          Screen Interval: 5 to 20           8.44         0.00         22.80         4860         0.3           10.28         0.00         22.24         20.33         48.0         5.1           10.00         0.00         22.24         20.30         4500         40.3         40.3           11.14         0.00         21.10         20.35         8000         0.8         40.3	Screen Interval: 5 to 20 4.80 4.80 4.80 4.8 50.3 4.50 4.3 6.3 6.3 6.3 6.3 6.3 6.3 6.3 6.3 6.3 6.3 6.3 6.3 6.3	Screen Interval: 5 to 20 4.80 4.80 4.80 4.8 50.3 4.50 4.3 6.3 6.3 6.3 6.3 6.3 6.3 6.3 6.3 6.3 6.3 6.3 6.3 6.3	Screen Interval: 5 to 20 4480 4480 4500 41.3 40.3 40.3 40.3 40.3 6.8 40.3	Screen interval: 5 to 20 40.3 40.3 916 5.1 40.3 40.3 40.3	5 to 20	5 to 20	5 to 20	5 to 20	6. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6		6. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6	2, 188 8.8 65.0 65.0 8.8	23000					No purge sample No nume cample
20.88 20.32 <500	11.39 0.00 20.85 20.32 <500 <0.3	\$2.085 20.32 <500	\$2.085 20.32 <500	<500 <500 <600 <603 <603 <603 <603 <603 <603	40.3 40.3 40.3 40.3 40.3	\$ 8 8 8 8 8	\$ 8 8 8 8 8	\$ 8 8 8 8 8		; 88 88		999	28						No purge sample No purge sample
Top of casing elevation (ft): 31.48 12.27 0.00 19.21 20.37 <500 0.3 12.14 0.00 19.34 20.32 <500 <0.50 9.85 0.00 21.63 20.33 <500 <0.50	Top of casing elevation (ft): 31.48 co.37 <500 0.3 <0.3	\(\psi \) 3146 \(\psi \) 2137 <500 \(\psi \) 52 \(\psi \) 53	\(\psi \) 3146 \(\psi \) 2137 <500 \(\psi \) 52 \(\psi \) 53	4500 0.3 40.3 4500 40.3 4500 41.0 4500 41.0	0.3 40.3 40.50 41.0 40.50 41.0	& ↑. ¢ 8. 0. 0.	& ↑. ¢ 8. 0. 0.	& ↑. ¢ 8. 0. 0.		6.0.0		8 6 6	<5.0	<b>4</b> 6	88	0.00°	8 8	25 25	No purge sample No purge sample No purge sample
10.59 0.00 20.89 20.33 140 <0.50 <1.0 (1.0 1.38 0.00 20.18 20.33 (4.0 1.0 1.38 0.00 20.10 20.13 (4.0 1.0 1.38 0.00 19.26 20.13 (4.0 1.38 0.00 18.66 20.38 (4.0 1.38 0.00 18.66 20.38 (4.0 1.38 0.00 18.66 20.38 (4.0 1.38 0.00 18.66 20.38 (4.0 1.38 0.00 18.66 20.38 (4.0 1.38 0.00 18.66 20.38 (4.0 1.38 0.00 18.66 20.38 (4.0 1.38 0.00 18.66 20.38 (4	10.59 0.00 20.89 20.33 140 <0.50 <1.0 (1.0 1.38 0.00 20.18 20.33 (4.0 1.0 1.38 0.00 20.10 20.13 (4.0 1.0 1.38 0.00 19.26 20.13 (4.0 1.38 0.00 18.66 20.38 (4.0 1.38 0.00 18.66 20.38 (4.0 1.38 0.00 18.66 20.38 (4.0 1.38 0.00 18.66 20.38 (4.0 1.38 0.00 18.66 20.38 (4.0 1.38 0.00 18.66 20.38 (4.0 1.38 0.00 18.66 20.38 (4.0 1.38 0.00 18.66 20.38 (4	20.88 20.33 144	20.33 140 40.50 41.0 20.33 450 41.0 20.33 450 40.5 20.33 450 40.5 20.33 450 40.5	140	6.50 6.50 6.50 6.50 6.50 6.50 6.50 6.50	ដូចបប	ដូចបប	ដូចបប		<del>-</del> <del>-</del> 7 7 7 7		ដឹបបបប		25. 23. 41.0 87.1	8 5 8 8 8	96222	8 <del>8</del> 4 4 4	86666	No purge sample No purge sample No purge sample
Top of casing 13.89 13.14	Top of cashing elevation (ft): 28.06 <1 < 15.89 0.00 15.17 20.33 <50 <0.5 <1 < 13.14 0.00 15.92 20.33 <50 <0.50 <1.0	adom (ft): 28.08	(ft): 28.06 16.17 20.33 <50 <0.5 <1 16.92 20.33 <50 <1.0	<50 <15 <10 <10 <10 <10 <10 <10 <10 <10 <10 <10	40.50 <1 40.50 <1.0	£ 6.	£ 6.	£ 6.		۸ <del>۱</del> ۵.		₽ <del>0</del>		<sup>10</sup> €	8 0	<b>2</b> 50 <b>2</b> 50	<2.0	6.0	No purge sample No purge sample Unable to locate Unable to locate Unable to locate Unable to locate
1200708 847 0.00 85.97 20.18 0.00 85.93 20.18 <50 <0.50 <0.50 <0.50	9.47 0.00 85.97 20.18 , 9.51 0.00 86.93 20.18 <50 <0.50 <0.50	85.97 20.18 450 40.50 40.50 40.50	20.18 <50 <0.50 <0.50	<50 <0.50 <0.50	05.0> 05.0>	<b>6</b> .50	<0.50	<b>6</b> .50		<b>60.50</b>		4.0		1.2	ŧ	41.0	<1.0	<1.0	No purge sample

HISTORICAL GROUNDWATER DATA FORMER TEXACO SERVICE STATION 9475 Warner Avenue, Fountain Valley

TABLE 3

Page 7 of 8

								4		-	inne	TATAL	MTDC	MTDE	Yar	Olor	FTRE	TAME	COMMENTS
WELL	DATE	DEPTH TO SE	HAS IN	GW ELEV.	WELL	2	E.	1	SENZENE		BENZENE	XYLENES	8020(1)		5	1	1		
		(teat)	(feet)	to MSL)	(feet)	(mg/L)	(HB/L)	(mg/L)	(hghr)	(ng/L)	(Pag/L)	(ng/L)	(100rl)	(mg/L)	(1)(64)	(hg/)	(hg/L)	(hg/L)	***************************************
				- (B): 10 10					Screen Interval:	£ 55									
RL-AM	amama an	10000	op or casing elevation (III): 34.30	20.78	10 63												•		
	07/15/08	2 5	900	200	19.64		29		<0.50	<1.0	۸.0	<1.0		Ξ	610	<2.0	<2.0	<2.0	
	12/30/08	10.83	00.0	21.53	19.81		8		<0.50	41.0	ح1.0	<1.0		3.1	639	<2.0	20	<2.0	
	03/18/09	10.18	0.00	22.20	19.88		8		Ø.50	<u>۲</u> 0.	٥.	۸۲.0		4 . 8 :	3	<2.0	<2.0	\$ 50 6	
	06/16/09	10.76	0.0	21.80	19.90		8		& 33.	o. 7	₽ 0.	0.1°		7.7	8	\$20 \$20	5.0	7,5	
	09/24/09	11.20	0.00	21.16	19.72		8		8.50 9.50	٠ <del>٠</del>	Q.	0.1°		34	6 į	<b>\$</b>	2.0	0.00	
	12/21/09	11.18	00.0	21.18	19.53		\$ \$2		8.50 50	<b>~1.0</b>	٥.	0.0		9 6	<u>2</u>	, 50	25.5	25.0 6	
٠,	03/18/10	9.13	0.00	23.23	19.38		96		<b>40.50</b>	<b>1.</b> 0	Q.	۷,0		3.3	92	<b>4</b> 50	2.0	5.5	
	06/24/10	8.33	0.00	23.03	19.32		\$ \$		<0.50	<b>41.0</b>	0.5	۷۲.0		. J.	37	<b>4</b> 50	07	07.5	
	08/21/10	10.26	0.00	22.10	19.28	-	ND<50		ND 40.50	ND<1.0	<b>N</b> 041.0	ND41.0		7.	83	NDKZO	ND-K70	NDCZO	
									1	1 1 2									
MW-20		Top of c	Top of casing elevation (ft): 32.35	on (Ft): 32.35	ç				Screen interval: 5 to ZA	.aaaa.									
	06/25/08	£. ;	8.6	20.92	9.5		Š		88	7	-			1.4	440	0.5	<2.0	20	
	90/11/08	11.48	8.0	86.03	19.82		7 9		8 6	7 7	7	7			90	8	<2.0	<20	
	12/30/08	10.45	0.00	DS:130	5 5		8 8		3 5	; <b>;</b>	? <b>.</b>	? V		. V	8	200	<2.0	<20	
	60/81/60	90.00	000	27.70	8 6		7 (	٠.	8 6	7	? <b>.</b>	V		V	8	<2.0	<b>4</b> 50	<2.0	
	60,91,90	20.02	000	21.72	9 6		3 9	,	200	7	Ç	V		÷	140	<20	<20	<2.0	
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7. J - Estimated value between the Method Delection Limit and the Practical Quantitation Limit
8. Data prior to August 28, 2001 provided by Wayne Pervy, inc.
9. Site resurveyed on February 28, 2002. Suway data provided by WGR Southwest, Inc.
10. \* The sample chromatogram does not match that of the standard. Quantitation was based on the standard.



SITE SUMMARY: TEXACO 121681 (GLOBAL ID # T0605902005)

### **GENERAL SITE INFORMATION**

Site Address: 9475 Warner Ave, Fountain Valley, California 92708 (Figures 1 and 2)

Previous Site Operations:

Former Texaco/Shell Service Station

Current Site Operations:

Strip Mall as of 2006

Latest Document Reviewed: September 5, 2008

### **KEY ISSUES**

- Methyl tert-butyl ether (MTBE) was released at the Site prior to December 1998 and can be traced from the source to groundwater in the Semi-perched Aquifer beneath the Site. Groundwater contamination has not been hydraulically contained and the historical and current extent of MTBE and tert-butyl alcohol (TBA) plumes has not been fully delineated.
- The vertical extent of the MTBE and TBA plumes has not been investigated in the source area or downgradient of the Site,
- Moderate to high concentrations of MTBE (120 micrograms per liter [ug/l]) and TBA (55,000 ug/l) are currently (2007) detected in Semi-perched Aquifer groundwater beneath the Site.
- Within a quarter mile radius of the Site there is one well that could provide vertical contaminant migration pathways. Oil production well SHELL-HOE1 is located approximately 600 feet southeast of the Site. The screened interval and sanitary seal information is unknown for this well. Therefore, this well could provide a preferential pathway for contaminant migration.

**EXHIBIT** 

Exhibit No.

1031 Rpt 2008-4 Texaco121681 text Rev 0 0.doc 12-23-08

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• Production wells NB-DOLS/1 and NB-DOLD/1 are major active public supply wells located approximately 3,000 feet southeast of the Site. Production wells NB-DOLS/1 and NB-DOLD/1 are screened in the Alpha to Lambda, and Omicron to Main Aquifers, respectively, and have been heavily used for production with average pumping rates of 150 and 220 acre feet per month, respectively, over the last ten years. MTBE has historically been detected in NB-DOLS/1.

### HARGIS + ASSOCIATES, INC.

and 12.6 feet msl (regional monitor well OCWD-SA-12), respectively (Geotracker 005207; OCWD WRMS). Therefore, a downward vertical gradient exists between the Semi-perched Aquifer and the underlying Talbert Aquifer. Regional monitor well OCWD-SA-12 has additional multi-level screens in the Beta and Lambda Aquifers which had January 2007 water level elevations of 4.0 feet msl and 1.4 feet msl, respectively, suggesting the downward vertical gradient extends as deep as the Lambda Aquifer (OCWD WRMS).

Production wells NB-DOLS/1 and NB-DOLD/1 are the nearest potentially vulnerable production wells located approximately 3,000 feet southeast of the Site (Figure 2). Production well NB-DOLS/1 is screened between 201 and 356 feet bgs in the Alpha, Beta, and Lambda Aquifers; and production well NB-DOLD/1 is screened between 399 and 739 feet bgs in the Omicron, Upper and Lower Rho, and Main Aquifers (OCWD WRMS). Figures 4 and 5 compare water levels measured in on-Site upper semi-perched zone monitor wells MW-1 and MW-6 and production rates in production wells NB-DOLS/1 and NB-DOLD/1. Production wells NB-DOLS/1 and NB-DOLD/1 have been heavily used for production with an average pumping rate of 150 and 220 acre feet per month, respectively, over the last ten years (OCWD WRMS) (Figures 4 and 5). Groundwater levels beneath the Site appear to be influenced by pumping from production wells within the area.

# UNITED STATES DISTRICT COURT SOUTHERN DISTRICT OF NEW YORK

**MDL NO. 1358** In re: Methyl Tertiary Butyl Ether ("MTBE") C.A. No. 1:00-1898 (SAS) Products Liability Litigation This Document Relates To: County of Suffolk and Suffolk County Water Authority v. Amerada Hess Corp; DECLARATION OF UNOCAL **CORPORATION and UNION OIL** City of New York v. Amerada Hess COMPANY OF CALIFORNIA IN Corp.; and **COMPLIANCE WITH CASE** MANAGEMENT ORDER NO. 4 Orange County Water District v. Unocal Corp.

- I, Morgan Clark, an authorized representative of Defendants Union Oil Company of California ("Union Oil") and Unocal Corporation ("Unocal"), make the following declaration under penalty of perjury.
- 1. I am employed by Union Oil as General Manager of Commercial Affairs, and I am familiar with the operations of Union Oil and Unocal.
- 2. I am authorized to declare the information set forth herein for and on behalf of Union Oil and Unocal. To the extent any of these facts are not within my personal knowledge, I am informed by authorized agents of Union Oil and Unocal that the facts stated herein are true.
- 3. The facts contained herein relate to the categories of information Union Oil and Unocal are required to provide under the Case Management Order No. 4, dated October 19, 2004. These facts are based upon all non-privileged information, including documents, within the possession, custody or control of Union Oil and Unocal and retrievable through reasonable effort.



#### PRELIMINARY STATEMENT

- 4. Unocal Corporation has not owned or operated any service stations, terminals, refineries, pipelines, bulk plants, or other similar facilities for marketing or distributing gasoline in the Relevant Geographic Areas of the focus cases addressed in this declaration during relevant time periods.
- 5. Union Oil is a wholly owned subsidiary of Unocal Corporation. Union Oil has never owned or operated, leased, or supplied gasoline under a retail supply contract to, service stations in the Relevant Geographic Areas of the Suffolk County and City of New York cases. Union Oil has owned or operated, leased, or supplied under a retail supply contract, service stations in the Relevant Geographic Area of the Orange County Water District case during certain time periods described below.
- 6. As of March 31, 1997, Union Oil sold and transferred to Tosco Corporation all its ownership, leasehold, and possessory interests in its then-operating service stations, refineries, terminals, pipelines, bulk plants, and similar facilities for refining, marketing or distributing gasoline. Since March 31, 1997, Union Oil has not owned or operated any service station, refinery, terminal, pipeline, bulk plant or similar facility for refining, marketing or distributing gasoline in the Relevant Geographic Area of any of the focus cases addressed by this declaration. Most documents and records associated with the operations and facilities also were transferred to Tosco at the time of the sale; therefore, certain documents that may contain information responsive or potentially responsive to the requests set forth in Case Management Order No. 4 are no longer in the possession, custody or control of Unocal or Union Oil.

<sup>&</sup>lt;sup>1</sup> County of Suffolk and Suffolk County Water Authority v. Amerada Hess Corp; et al., New York State Supreme Court, Index No. 02-22305 (filed 8/19/02)

<sup>&</sup>lt;sup>2</sup> City of New York v. Amerada Hess Corp., New York Supreme Court, County of Queens, Index No. 25720103.

<sup>3</sup> Orange County Water District v. Unocal Corp., et al., Orange County Superior Court, Case No. 03CC00176 (filed 5/6/03).

The information set forth in the foregoing declaration was assembled by employees of Unocal Corporation and Union Oil Company of California from said companies' records and files by personnel in the appropriate offices, departments, and divisions of said companies and by said companies' counsel. I am informed and believe that the matters stated herein are true and on that ground aver that the matters stated therein are true to my information and belief.

DATE: December 21, 2004